

these substances be admitted into the new mouth  
and with solution & absorbed - this is unlikely to  
be by the lungs - If admitted that any part absorbs all  
must - ~~quod~~ inmiss probat, nihil probat - Admits  
the capacity of the experimenters in every respect &  
still not able to detect the substances - Does not say  
that all substances are admitted - Question still  
remains How do madder & rhubarb enter the system  
& not others? They admit this & still deny cutaneous ab-  
sorption - Why did they limit their enquiry to the serum  
of the blood alone - Their effect at best negative -  
Facts have been inadequate & needs better experiments to  
prove this - All substances clasped 3. into Kingdoms -  
Mod Operandi of med must act by the vital prin-  
ciple acting on them - Admits syphilis in many cases  
but not in all -

By Mat. Mod - must exp a cure of disease -  
To what cause is it owing that during 30 <sup>centuries</sup> ~~ages~~ no  
correct catalogue of med has been constructed? Could we  
confide sufficiently to a Diabetic plan - This dict  
of more consequence - The really useful articles are  
few in number & very few in the 40 sub-st



5000 in an Ant-Med-Domestic medicine  
not to be preferred unless of superior power.  
Observation & Experiment. The 2 great pillars of <sup>success</sup> of Med  
Both requisite - One is liable to fallacy - & can be  
not alone be regarded as decisive - Their reciprocity of  
necessary - Observation suggests new experiments - These  
can press a series led to discover the mystery & Circle  
Lights of science - an experiment to observation - Requires  
the conjoint observations of all men - One man not so  
competent alone - By truth & a mean mere theory. We  
which can not constitute the healing art - These theories  
in their turn are overturned - & supplanted by others  
as ridiculous - Observations funded in the Law -  
Domestic Accas constitute the true theory -  
That Theory ~~is~~ is most useful which explains the  
greatest number of facts - Can not always rely on  
analogy - Easy to fall into error but difficult to  
escape - Facile decipimus Avarus, sed reverentia primum  
his labor, hoc opus est.

Action principle of Specacanth consists in a remote portion of matter called ductus -



Dr. Gibbon

How are wounds divided? What is the char of  
excised wounds? Can no bleeding - also common  
to Lacerated Wounds - What is of punctured  
wounds? Can they stand with danger? What is danger  
of tetanus coming to? Lymph - What is of undest  
the penetrat wound? Give an example? What is  
their danger? extent deep & open large and? Incised  
wounds? What is danger? Lacerated? What is the  
danger in Lacer? Gangrene - What is Union - 1. Int  
What is nature? Enumerate diff. natures? What is dry  
nature? How is the twisted nature made? When  
necessary? When interrupted? What is frequently?  
Inten & Twisted? What is the continued nature or  
Lower's low nature.

Gen Treatment of Wounds -

Continued wounds - Treat as on circumstances -  
when robust danger of gangrene & by fall - Sh. give  
stimulants & nourishing diet - apt to affect the  
nervous system - Where no concupion - Vt & Anti  
phlogistic remedies - Where matter forms sh.  
be promoted - & evacuated by small opening - Two pr  
points to be attended to - Sinking & inflan - & then rem



Punctured wounds difficult of cure - 1<sup>st</sup> object  
to remove extraneous body if practicable - sometimes  
very deep - Should endeavor to extract it rather than  
suffer it to be encouraged - If not opened - may  
proceed to - Sometimes must use tents - to  
prevent healing & orifice - Sponge kept in wound  
a few hours -

Penetrating wounds allied to punctured & on  
occasion no inflame - fix in vital parts - cure  
if large vessels be laid open & the depth  
when in delicate parts extra takes place -  
more apt to run into supp than Punctured -  
Lacerated - Similar to contused - Shd. en-  
deavor to prevent gangrene & not irritated -  
Stimulants at first - & after depletion if inflame  
Shd. be kept in contact by adhesive straps  
or suture - When adhesion does not take place shd.  
not cut away the ligatures as advised by J. Ke  
May take place by suppuration & granulation -  
In all great operations flaps are to be kept by ad-  
hesive straps - Bell thinks it is a bad thing  
adhesive inflammation -



Dr. Coxe, Monday, Nov. 15<sup>th</sup> 1879. Lecture 5<sup>th</sup>  
Solidity & fluidity are only relative terms, & the ul-  
timate particles of all matter are solid - Endeavour  
from the vitality of the blood. Red blood amounts to about  
15 Pounds - & such a quantity is not to be dead matter. It is  
changed by changes in diet - <sup>the</sup> colour of milk &c. & substances  
exist in it at one time which do not at another -  
Iron & lime & phosph - reaches its destination if set by the  
circulation - these articles are taken as medicine - others as nour-  
ishment - now these must be taken <sup>into</sup> the circulation  
- else would not be nourished. From Arabic - I grasp  
an action from local impression - & explains many phe-  
nomena, but not all - It is inexplicable - <sup>Alleg.</sup> Vegetables <sup>are</sup> composed  
of the same ingred: only in diff: proportions - Very Salaf & Spe-  
cimens, & it must be the vital principle acting on them  
not their impression alone - Do remedies ever induce this  
effect by entering into the circulation? <sup>of the blood</sup> Its vitality is indi-  
cated by the different changes it undergoes in diseases - con-  
solidating in some & dissolving in others - Scours in Rheumatism  
& dissolved in Malignant Fever? What then produces these chan-  
ges? Blood must be organized no matter how absurd it ap-  
pear - Solidity not essential to organization - Nerves are



He says are not essential to organization - Ultimate parts  
of all fluids are solids - & only differ in their cohesion -  
Comparing muscles or vitreous humour with bone they w<sup>d</sup>  
appear relatively fluid - The gases <sup>are</sup> also analogous oxygen  
being much heavier than hydrogen - only relative -  
Blood contains globules more solid as they sink in the  
other parts - these globules must be alive or organized, <sup>for we</sup> cannot  
reason on the score of recognition alone - the Egg - fluid  
organization - The action of diseases and, is dependant on  
its peculiar organization & can only be explained in this  
way - It is to s<sup>t</sup> that the blood has no nerves - but they are  
not essential to organization - Nerves formed - blood.  
Numerous principles must enter the circulation or c<sup>d</sup> not  
become organized - enamel & teeth - Phosphate of lime -  
bones - Sulphur must be compound as it is found in the  
system & not taken in by the mouth. Boyle says <sup>the</sup> body is  
not a mere statue, but composed of numerous different  
substances & changes take place by their action - What  
proof have we that because we do not find substances  
on analysis which have been taken in, that they do  
not exist in some state or other - Different analyses  
afford different results & can not be considered as perfect.



Neither is it proven that any article we give is efficient  
 & state we give it - But may be owing to some of its in-  
 dividual parts, viz Nitre &c. - By taking nitre for a consid-  
 erable time it will be found in the urine & therefore must  
 either be carried whole into the circulation or recombined  
 from its constituent principles - We do not know how small  
 pox operates - Children born <sup>with</sup> small pox must be contaminat-  
 ed by the circulation - It is sd that acid or subst injected  
 & bloodvessels produce death - I shall simply state facts -  
 We ought to rely on the experiments of Boerhaave & such men -  
 Both sides may be right in the experiments by <sup>their</sup> deductions must  
 have been erroneous - Death does not always ensue from  
 injecting substances into the bloodvessels - It? is rely -  
 experiments of persons unaccustomed to them - & our deduc-  
 tions are too generally drawn from such sources - That  
 blood is changed is proven by Hippocrates in foetus - & my  
 own child made drunk from sucking milk & drunken  
 nurse - If blood ~~for~~ death is produced when substances  
 injected & the blood, it do not prove that it is so when  
 they enter by the lacteals - here it is diluted by the chyle &  
 enters slowly in subclavian vein - the cases are dis-  
 tinctly different - No analogy & deductions are to fallaciously



Efficient to detect subst in the blood is h only a negative character - One positive effluent of more value - We cannot detect the principles of vegetables in the blood except only their ultimate principles which are similar in all.  
Dr. Gibson -

When is gangrene? When but little blood need to be or best local - 2 mds. Scarf & Leeches - Leeches best exact when Leeches c n be used - as Aberration - In irritable persons also c n be used - Leeches s b app on the affected part - Hunter thinks in all cases when practicable Local c n be used - Dr. Gibson thinks general is given as efficient. 2d Case - Aberrant Stage - Antiphlogistic regime - 3d Treatment of Suppuration - 1st keep up the action - part - Heat sh<sup>d</sup> be applied - for done by foment: steam & hot. which increase action & prevent suppuration - Heat with proportion & degree of inflam - sh<sup>d</sup> be given to the infl part. Dry lint - When suppur is indur sh<sup>d</sup> prevent it from going too far. Confine from products & consequences - causes, sinuses &c. Treatment of Ulcerative Inflam - viz Healthy - 2 things in view - 1st Not cured too far - 2d Not too little. In mild cases include air - moist ointment - red lint. w calamine - Prepare by band or roller - of cotton & other Plasters - not suitable to every case - When want of action



Dry heat & increased pressure - When indolent Charolice  
Treatment of Hectic Fever - R<sup>o</sup> 1<sup>o</sup> beats the only disease -  
When Extremities Ulcer, amputation - When in 6<sup>th</sup> rem by Amp<sup>o</sup>  
sh<sup>o</sup> resort to Count: remedy - Bark wine, remove - country  
diet rich & nourishing - Exercise Horse or carriage -  
sh<sup>o</sup> Check sweat - acids usef - Prevent Diarrhoea  
Treatment of Gangrene or Sp<sup>o</sup>chelus - active remedies -  
sh<sup>o</sup> also possess stimulant & tonic power - Bark appears to  
possess a specif effect - Suffer in dry gangrene - 1<sup>o</sup> Bark  
wine & aromatics - Powdered bark best - Sulph<sup>o</sup> acid -  
also external applic - Decoct of oak Bark preferable -  
Wine gums not usef - sh<sup>o</sup> be appl - sound parts -  
Scarf to be advised - but not in benefit, too stimulating -  
sh<sup>o</sup> prevent effusion of irritating fluids as urine -  
Local applic - Best Blisters - Potatoes - canth<sup>o</sup> & yeast - Charms  
not very usef - In some cases amputation to be resorted to,  
but erroneous -

Treatment of Dry Gangrene - No settled plan - Amputation  
only resource -

Treatment of Pott's Gangrene - Bark of no advantage - Phos<sup>o</sup>  
only serviceable according to Pott - D<sup>o</sup> P<sup>o</sup> thinks need un  
availing - Blisters cured in one case - Dorsey -



6<sup>th</sup> Study diligently Mr. Hunter.

Dr. Hare Monday, 12 o'clock, Nov. 15<sup>th</sup> 1819.

Sulphur <sup>or Chlorate</sup> & <sup>or</sup> Muriate <sup>of</sup> Potash - <sup>from</sup> fulminating powder.

Used in guns instead of gun powder. Spenser's apparatus of fluid racks then preferable for thermometers.

Sanatorium 1<sup>st</sup> varies in proportion to atmospheric pressure. Mercury best - Alcohol less accurate. The expansion of mercury most equable - Construction of the thermometer.

For temperature below thirty nine we must employ thermometers of alcohol - Differential thermometer of Leslie.

Dr. De Butte's variety - Straight tube with a bulb at each end. Atmospheric pressure sh<sup>d</sup> be well understood to explain many chemical phenomena.

The pressure of any fluid is the same in all directions - & the equilibrium is the effect of pressure - Effluents This is the fundamental principle of hydrostatics.

Dr. Horner vice Dr. James Monday 3<sup>rd</sup> o'clock.

On the organs of generation -



Dr Cox, Tuesday, November 18<sup>th</sup> 1849. 9 O'clock. 7

Facts which prove the admission of substances into the circulation without proving fatal - both by injection & the lacteals. Beginning with the chyle - Dr Martin Lister 100 yrs ago found blue chyle in the lacteals - Confirmed by Messrs - Indigo gives chyle a blue colour, but a madder, red - Substances when given as medicines are administered only in minute doses & are more readily received into the lacteals than when in large doses they ~~are~~ <sup>are</sup> by experiment - Ventricles <sup>empty</sup> & in contraction - in 40ths in hour Substances are enter so numerously that there are no appreciable by our tests - Cannot accumulate as they pass out of the circulation We also see after a serum, & why are the matters attracted to the other parts - iron & globules - Madder colours the bones & c. can't detect a circulation - Many plants apparently possessing no colour may develop a colour in their different chemical changes - More chemical tests are inefficacious to detect subst & circul - & only negative - Is life destroyed by injecting subst & blood vessels - For example injected oil of vitriol - dog since death - Fabricius & Haller - wine, opium, purgatives, emetics & so inject: since death - Dr L. Home injected colchicum with good effect - vinegar, sugar, opium - Zips salt - Hot wine produced drunkenness - Salt of A. wine - Decast of serum, bile, repeated with similar results



Dr. Syberst's experiments also prove that death is a res  
 from injecting blood into circulation - John Hunter M.D.  
 Lectures - Experiments - Salt injected Borax - vinegar - Sulphur  
 no permanent effects - Sol: of Opium convulsions - Pin just re-  
 laxation, Zif Laurel Water recovered - Only continue as long  
 as the cause remains - Specac - Saluf - purged - Rhei.  
 Aether & vinegar death - N. Acid, in fatal - Pin fatal -  
 Extraneous matter does not kill - J. Hunter says that it is  
 most probable that the blood is first affected with disease &  
 then the solids - if we agree - Must credit such testimony -  
 Many articles affect the milk - garlic, saffron, madder, &  
 Children salvaged, & filthy taste of birds, these articles in  
 their efficient form in & to be conveyed into the circulation  
 & in decomp - or the co - produce their effects - Chem-  
 ical changes could <sup>not</sup> produce these results - In the Urine  
 small serpentine, indian fig red, Sir E. Home & others.  
 Haller - Mercury is s.<sup>d</sup> to have been detected in its me-  
 tallic form - <sup>Gold impurities in</sup> serum & saliva - If it is not detected does  
 not argue that it does exist. I consider metals as having  
 a compound nature, & for this reason we do not find  
 them in their metallic state - Van Helmont fed a plant  
 on distilled water, & disengaged iron - Now this iron must



to be found in the vegetable - & Cope infers that iron oxides  
are compound - Licutius states from Castells that  $\frac{3}{4}$  of  
mercury is in basii Cranium - Ancient Authors men-  
tion many cases - Paracelsus, Donatus, Haller, Peter Potter, Præsius  
Cruzgins, Phil. Sæus - found mercury in vesicles on the skin, Van  
Swieten also - Boerhaave can not be opposed by ridicule -  
The discovery of scum like a flock of sheep - not Boerhaave  
but Leuwenhoek -

D. Gibson -

On Wounds - Divided by Writers in several species -

Cutaneous Wounds - Cannon balls & falls &c - are injurious to the  
bones - Effects more permanent - when not jagged - deep seated ex-  
position & carries a bone apt to follow - B. Hall -

Punctured Wounds - Dangerous according to their situation - appear to  
affect the lymphatics -

Penetrating Wounds - different in being extensive openings - Whom  
- sword or bayonet - more dangerous -

Lacerated Wounds - Chastising - few no hemorrhage -

Incised Wounds - Not dangerous - Hemorrhage -

Union is first Intention - a wound in the head - same manner  
Tallincoth's, Cope's - Treatment - Pictures & Bandages - Necker  
means - Dry Sutures <sup>by</sup> Adhesive Plaster - Strips the best - Boeck -



Dry Sutures most preferable - Sutures Crasata - Made by needles &c - Divided into different kinds - Twisted Sutures made by steel pins as in Hair lip. Needles alone will do. Continued Suture - Pins not used - also called Havers's Suture. also restricted Suture - Interrupted Sutures - Best for most wounds - Quilted Suture - Useful in Wounds - Abdomen -

Dr Hare - Tuesday Nov: 16<sup>th</sup> 1819 -

Proving the equality of pressure - By just so much as the heights of different fluids by atmospheric pressure are inversely as their specific gravity. Experiment - Pressure of water on mercury inversely as the weight of the latter -

Atmospheric air 840 times lighter than water -

Dr Saunderson - Wednesday 3<sup>rd</sup> O'clock - Nov: 17<sup>th</sup> 1819 -

On the passage of the foetal head - Pelvis - Brim, outlet, & cavity. Oblique per. occurs in passing thro' the brim - Size of Pelvis - from the Sacro - Iliac Symp <sup>long diam</sup> - Acet:  $5\frac{1}{8}$  - Transverse  $5\frac{1}{4}$  - Antero - Post:  $4\frac{1}{2}$  inches - Diam & Outlet from one ischium & other  $4\frac{1}{2}$  - Long & inferiorly & point & coveys & arch Pubis 4 inches in natural st. in Parturition 5 inches - Separation of bones & pubis not frequent - Only natural & fecund fig. Bandage only necess. when rep the place - Size & foetal head - Sutures - joint.



anterior fontanelles 4 angles & 4 sutures  
in sagittal & coronal sutures - Posterior fontanelles - sometimes  
no form but only 3 lines or sutures - formed in occipital & parietal  
bones - Diameters - Long - in forehead & occiput - 4 inches - Oblique  
in vertex & chin - 5 inches, Diff: Labour 5 - Transverse -  $3\frac{1}{2}$  3 -  
from one parietal prot & another - Perpendicular:  $3\frac{1}{2}$  -  $3\frac{1}{4}$  inch

Different Presentations - in 4. Old - Brachela  
six divisions - 1<sup>st</sup> Presentation takes place  $\frac{1}{4}$  8<sup>th</sup> <sup>lines</sup> once - 2<sup>nd</sup> -  
3<sup>rd</sup>, 4<sup>th</sup> & 12000 - 4<sup>th</sup> more common than the 3<sup>rd</sup> but once in 100 times  
in 1<sup>st</sup> & 2<sup>nd</sup> - 6<sup>th</sup> in diff & most rare - but once in 12000, in-fer  
requires instruments - & still born - In many cases can be  
labour 5 or 8 hours by converting the 4 & 5 feet in 1 & 2 -  
Apex - 2 - 1<sup>st</sup> in Super Strait - from the Umb - a put a coccyx  
through the center & pelvis - 7<sup>th</sup> alw appl the forceps in the  
Elexis & outlet - from the 12<sup>th</sup> Bone & Sacrum - a Sympt. Pat  
Deformity from Rickets & Malacosteon -

D. Cox - Thursday, 9 O'clock - Nov: 18<sup>th</sup> 1844 -

2 Places on which rest act & the skin can & skin  
must be connected with them - 7 Lungs in the skin:  
their analogy is proven by their peculiar circ: Skin &  
Kidneys interchange functions - precise balance & system  
Skin & stomach sympathize - cold water in constip -  
Nations in common receptacles - Stomach with skin



2 skin with the stomach - as first to food & sleep  
we regard as continuations of each other - The  
Sympathetic Act is no surprise when we act properly  
Halter, Wine, Spirit, Stimulants & operate immediately  
their ultimate effects are to reduce sleep & in both  
ing to asorption - their stimulant action sympathetic  
think mercury acts by entirely the circulation & a  
sympathy - the skin properly the only surface on which  
which need act - On Cutaneous Asorption - Think  
asorption takes place as well from the skin as in  
the intest from the lactals - a proof of their identity  
of surface takes place in small foot measles. The  
authors recommended nutritious baths - Paracelsus  
nourished men for several days by the skin  
Haller also - Boerhaave sweating thro' the skin instead  
Attempt. to be in to show the need enter by the lungs  
& there they must be taken into the lungs & absor-  
bents - Can we also allow this to the skin -  
Theory & Practice are at variance <sup>they</sup> ~~the~~ advice flows  
in mercurial friction - The removal of inter-  
nal parts are not their only use - Does not  
admit the accuracy of their experiments - Consider



When suppuration is about to be established & P. not cut away  
the lightness as we otherwise expose the surface - May use  
the same straps & when a n. b. brot. together soalties  
the surface

Induced Wounds - most simple - May use sutures in  
every case but absurd - In Wounds a face & scrotum need  
interrupted suture best - face - Proper & very irregular wound  
angular - a stick at each end - or deformity to be prod.  
Have lip, <sup>sh.</sup> commence at the lower edge as deformity is  
produced - P. bring the retracted edges & muscles in  
contact - as contraction or debility w. b. induced -

Induced suture used in deep muscular wounds, apt  
to induce irritation - Must also attend to the constitution  
Practical Rules - suppress if Hemorrhage -  
ancient incantations & charms, soft actual cauteries -  
subron Pare 1<sup>st</sup> and Ligatures - Styptics in small wounds  
depend on ligature & sponge - Tenuaculum - can only  
be used where the vessel is cut across - Needle useful when  
the artery can be brought out, & for includes a portion  
surrounding flesh - Sponge used in deep cavities -  
draw out a n. b. drawn out - Mode of application -  
sutures ought to be used when sponge can be used -



Torrecellian - only used in the extremities -  
 Substitute a handkerchief with a knot - & riddle -  
 when the Torrecellian is used the needle is used the Torrecellian  
 position a round cellular substance - when  
 in the neck cannot use the finger - when in narrow  
 passages - either stop the orif: or cut down & tie up  
 the artery - when Spargis is used must attach a lig  
 to extract - oft is under bone arteries & sh. to  
 removed when danger of hemorrh. has ceased -  
 when hemorrhage from cells of bone - knead  
 wax into the cells -

Dr Hare Thursday Nov. 18<sup>th</sup> 1819. 12 o'clock.

Torrecellian vacuum - distinguished from that by  
 the airpump in being more perfect - Prod - by filling  
 a tube with a fluid perfectly & inverting it over  
 the same fluid, - <sup>mercury nearly 30 inches</sup> measures the pressure of the atmos-  
 phere over the whole surface of the globe - This pres-  
 sure influences vitality & all chemical phenom.  
 Proves that when we ascend mountains decrease  
 Mercury 11000 heavier than air - multiplied by  
 30 gives the height of the atmosphere - Pressure is  
 about 15 pounds on every inch square inch -



19  
Exp. - bursting bladder by atmospheric pressure - The action of the common water pump is in consequence of the atmospheric pressure - Water rises 30 feet.

Exp. - common <sup>water</sup> pump - cannot entirely draw out the water because the tube does not extend to the bottom -

Exp. - Air pump - any portion of air left in a vessel occupies every portion of vessel, while water only the bottom - bladder -

Exp. - Gum Elastic Bottle enlarged - Experiment - Gum elastic bottle filled with air sinks in water at the common pressure & when pressure is removed rises - Fish analogy - Elasticity in common acceptance means the power by which a body returns to its original state after extension - & I wish you to understand it in this way - Consider air in an compressed & dense of compression from surrounding substances - & expand when these are removed & w. fill all space - He then explained the Construction of the Air Pump - Experiment - forcing air through wood - Caloric is the antagonist of Atmospheric pressure - may produce expansion either by reducing pressure or adding an additional quantity of heat - Experiment - Converting vapour into fluid or liquid by ab-



<sup>20</sup> Phenomena of Ebullition - Experiment - Heating water  
in a boiler - ascends & descends - Boiling point influen-  
ced by atmospheric pressure - & sh<sup>d</sup> ascertain the Baromet-  
rical pressure - varies from 27 to 30 - & sh<sup>d</sup> attend to it  
in constructing the Thermometer - Explained the fluidity  
of Aether - Chemical affinity only exercised at sensible  
distances - Evaporation different from ebullition -  
Evaporation owing to the affinity of the atmosphere for  
the particles of the fluid -

D. Case Friday Nov. 19<sup>th</sup> 1819. 9 o'clock A.M.

The endeavor to abolish the idea of extraneous matter  
& cutaneous absorption arose from the abolition of the  
Hemorrhoidal Pathology - Preliminary steps to the intro-  
duction of Medicines - 3 differ Means - First, their  
sensible qualities - smell taste &c. but can not al-  
ways rely on them - Cullen's observation that insipidity  
possesses no medicinal property, this is not correct - How  
little the smell of Cinchona, gamboge, Jalap &c.  
What taste Colamel &c. does not depend on taste & smell  
if so rancid bitter & putrid, most powerful - Nor on  
colour - must therefore rely on them - Secondly,  
Potential Affinities - In particular instances useful



But generally not proper - ~~Solanum Dulcamara~~  
 poppy, peach, perry apple - Cannot be applied to ascer-  
 tain their properties - Must be compared with their  
 sensible qualities & Nature experiment - In our

3. Chemical Examination - we are sometimes deceived ad-  
 vantage - this has purged the Materia Medica of many  
 substances - Can not afford a certain clue, but acquaints  
 us in what parts the active qualities reside & separate  
 them from others - <sup>Assembled us to perfect the preparation of medicine</sup> By it alone we can not substantiate  
 the virtues of a medicine - Many are poisonous to man  
 which is fatal to brutes - Simply chemistry unimprovable

4. Experience is the principle test & apart from it we  
 can say a priori what are the virtues of substances -  
 And be founded on actual experiment in human body -  
 animals but not safe as may be poisonous to man  
 May first carefully try it on inferior - Experience sh<sup>d</sup>.  
 be added by correct reasoning & reflection - May be con-  
 sidered into 2 parts - True & false - I<sup>st</sup> shall endeavor  
 to expose their fallacy - 1<sup>st</sup> Amulets & charms still prove  
 that the days of Sir Kenelm Digby not passed by - ~~Scroth~~  
 nails - Women's linen, women's bite poisonous - Strong  
 tendency to be misled by false experience - Sir Rob<sup>t</sup>.  
 Boyle is wrong about them Smoke & stench - Holley



not confined to any age or any part of world.

2<sup>d</sup> Precious stones, <sup>powders, &c.</sup> 3<sup>d</sup> Great substances - raw eggs <sup>Jaundice</sup> as eggs of a yellow colour may have originated from the doctrine of signatures, Bread pills & Powder of foot w<sup>ch</sup> may be found useful in creating confidence - 4<sup>th</sup> Diseases formerly recorded no longer exist - Acid & Alkaliescent acathesis, <sup>spit, &c.</sup> alkaline & acid dyspepsia, &c. - If the atrabiles - like Cook's lecture - 5<sup>th</sup> Where dis ease is map of blood were the signs it w<sup>d</sup> make no difference whether diet present the administration of great medicines proves or not, but there is some truth in these opinions of the ancients. The source of false experience 2<sup>d</sup> is Mistaking one dis. Osteo celsa supposed to expedite the healing of broken bones. Cure for another. & administering wrong medicine.

7<sup>th</sup> May arise from mistake of the remedies themselves - 8<sup>th</sup> Know all the virtues of the Materia medica. <sup>Dysenteria has been mistaken for Malaria</sup> 8<sup>th</sup> Another source of false exp<sup>er</sup> originates in the falsehoods which too often exist in Med. writings. <sup>Every day will prove this.</sup> 9<sup>th</sup> M<sup>d</sup> to be lamented - Having pointed false exp<sup>er</sup> I now shew in what true experience consists.

Recap. - Must be sceptical as to the introduction of new medicines & virtues far exaggerated - M<sup>d</sup> not always ascribe the cure to the medicine, as nature frequently cures without - Other circumstances may produce effects which we attribute to medicines as cold &c.



Dr. Gibbon -

Wounds of the Scalp. - Punctured wounds give occasion  
Erysipelas Inflamm. - Both destruction unformed -  
Pain, but little danger, but violent nervous irritation re-  
curs - Sh<sup>d</sup>. lay open the scalp & bone - When brain is in-  
jured the symptoms are more intense & urgent - Scalp &  
periosteum separate in this case but not in the former  
dangerous dis. & freq. fatal.

Continued ~~less~~ wounds of the scalp - Less dangerous -  
Less extravasation exists - Where extravasation small soon  
absorbed, where great the bone is apt to be destroyed -  
Case Harrell - Extr & under the scalp - bone absorbed -  
granulations from the dura mater & Leadi - Case by Hill  
owing to pulling the hair - rare - Children more liable to  
the formation of tumors by extravasation - Sometimes res-  
embles fracture & bone - partic: if stupor & vomiting - In  
scalp alone the stupor not so urgent - & continues none at all  
Tritment of blood tumors - resorbs - When it remains  
a great while dangerous to the bone - Sh<sup>d</sup>. evacuate the  
blood - Lacerated Wounds - not dangerous unless  
bone injured - Recent treatment, scalping - La Motte 1<sup>st</sup>  
abolished it - Object & mod say is to procure other



24  
Incised & Lacerated wounds in every inst. held together  
Opinions differ as to holding them together - Some  
Stitches & others adhesive plaster - One Sir J. Esdaile - When  
stitches used recovered - Thinks more hazardous results from  
stitches in the scalp, but sh<sup>d</sup> not prevent their use  
if used in use so many stitches - sh<sup>d</sup> be made -  
Angles & Wounds - by Interrupted Suture - When union  
is not accomplished & matter issues out & disch<sup>g</sup>  
by puncture - In all wounds 1<sup>st</sup> Object - To procure Adhesion  
or union in every case - Bring together by adhesive  
straps & bandages & if not by Stitches - Sometimes violent  
symptoms arise - from fractured wounds - Cont<sup>g</sup>  
contaminated wounds - Death - Pouteau relates many cases  
Case; Blow from a chain recovered, after Hypospadias -  
Loss of speech, relieved by opening the scalp - Dr. Physick's plan  
when deep seated pain after injuries of the scalp - Divides  
the scalp down to the bone - vide Dorsey - Turbidity -

Wounds of the Face - In upper wounds - wood  
sutures - Wounds - Salivary Ducts most troublesome  
vide Dorsey - When we cannot obliterate the orifice  
of a duct into the mouth, we must destroy the  
duct -



D. Hare Friday Nov. 19<sup>th</sup> 1859.

Density of the coin is in exact proportion to the pressure.

Experiment - Column of mercury diminishing the bulk of atmospheric air - The effect of atmospheric pressure is the increase of heat - Diminution of pressure or the increase of temperature affects the bulk or increase of gases -

Experiment - Ether pushing up mercury when vaporized  
Exp. Pressure of steam - 30 & vapour thirty degrees hotter than boiling water supports a column of mercury equal to the pressure of the atmosphere - Olive Oil's specific gravity is the pressure of 30 atmospheres - Ebullition is the escape of the vapour of a fluid produced by heat or aqueous gas passing thro' - When the pressure is increased the ebullition ceases & the boiling point raised - ~~Exp~~ Ecological Phenomena -

Count Rumford <sup>says the</sup> Water in Gunpowder <sup>when inflated</sup> equal to pressure of 800,000 lbs in a square inch - Exp. Heating water & diminishing pressure boiling & ebullition takes place - Exp. Freezing water by evaporating ether in an air pump - Atmospheric air in its chemical operation aids ebullition & in its mechanical operation prevents or retards it - Freezing water by ether is the consequence of producing fire in a condenser - Presence of the infl matter <sup>as</sup> ~~is~~



26 The production of cold by evaporation not confined  
to ether but applicable to all substances & in  
this way accounts for cold in winter. Owing to  
the power of dissolving water which the wind possesses  
& water over deposits ice. Some substances become  
solidified without passing thro' the intermediate  
state of fusion, as Camphor &c. East Indians  
produce ice by evaporation. When air is rendered  
more rare <sup>it</sup> ceases to hold in solution so much cold  
vapour.

D. James Friday 19<sup>th</sup> 1819.  
Of the diseases of the Parts of Generation. Syphilitic kind.  
We have in parts imperfectly formed & naturally from  
Elongation of the Sphincter sometimes owing to skin  
thrust tumors. Nature - Hottentots.

Elephantiasis - fatal to generation when previous to puberty  
& when later in life lose the power of procreation.  
In female breasts wasted & no areola. Sometimes ne-  
cessary to extirpate the Labia & Nymphæ - not much dan-  
ger of hemorrhage. D. Northamer extirpated Labia very  
much enlarged 11 Pounds - 3<sup>d</sup> Day after the operation  
uterine symptoms appearing were dispersed by cure.



tie potack to the spine -  
Redematous swellings of the Labia - when troublesome  
punctures sh<sup>d</sup> be made to evacuate the water more  
usual in advanced pregnancy - Sometimes subsequent to  
delivery - Can tumor a labia simula- to child's head -  
Cohesion of the Labia sometimes takes place in infants - not  
of much consequence if the urine c<sup>d</sup> be evacuated in children  
Ullary is generally divided by pressure on the probe -  
Inflammation & Suppuration - Labia - causes cold  
difficult Labours - Symp<sup>t</sup>. Pain tenderness - soon suppur-  
ates - at 1<sup>st</sup> vs. & Antiphlog - L. vs. - by Leaches, Opium  
rued & vegetable diet. opium - Sol: Acet: of lead through  
the cure - When suppurates evacuate by small puncture -  
Peridantal Herpes - between the ischium & vagina -  
from T bandage -

Some anomalous & sympathetic diseases -  
Mortification of the ~~vagina~~ Peridantal & Perineal -  
occurs gen between 1<sup>st</sup> & 6<sup>th</sup> years - Treatment - Open the  
bowels - Parts washed with Acetate of lead - & lead poultices  
Bark in Decoct: Colomb: when ulceration has commenced -  
Ung: ofy: Plomb: when ulceration diminishes -  
Thinks this disease sometimes mistaken for carcinoma



28  
of violence - Laceration of the Perineum -  
all tend to first stage - various in direction & extent -  
Rare to quadrupads - Most frequent to circular  
courses - 1 Increased tenderness - skin 2 & Position  
during labour - when on the side most frequent 3 At-  
tending labour - 4. Exertion - Patient herself - sh<sup>d</sup>?  
support the perineum. Dr. Deuman says occurs from  
interference -

Enlargement of the Clitoris - Sometimes very large at  
birth - Disting. - males - no testicles - no urethra -  
in the flans - c b felt posteriorly - Case by Brande -  
In some cases organs of generation entirely want-  
ing. resemble the external parts & outer portion of  
the bladder - cut away -

Enlarged cancerous affection of the Clitoris - One  
in Burns & trip - Knife, no cases in this country.

Dr. Physick Friday Nov. 29<sup>th</sup> 1819 -

Remarked that polyp of the nose always originates from  
the inferior turbinated bone, & sh<sup>d</sup>? always apply the ligature in  
that direction & not towards the Septum narium - Instead of com-  
pressing the neck after fixing the wire round it & through the  
canula, he forcibly tears it away & by that means frequently



brings off with the polypus a small piece of carious bone, the  
cause of the disease.

D. Core Monday November 22<sup>d</sup> 1849 -

True Experience - by the which real prop-  
ties ascertained - Experience is the touchstone  
of truth. & sh<sup>d</sup>. be widely diffused. Idiosyncrasies  
difference of sex, climate &c must be studied -  
Can only draw conclusions by cautious steps -

1<sup>st</sup> Idiosyncrasy - implies a peculiarity of con-  
stitution - As poison vms &c - Many persons  
are affected differently - proves that the living sys-  
tem is the active agent & acts on dead matter -  
Analogous to a jack which can only move by fran-  
tizing power - & chemical changes by Chem Action  
& so with vital action - Why are persons affected  
by peculiar odours, tastes &c - if not owing to pec. act.

Idiosyncrasies not peculiar to families & might  
& nations - Swift bronchitis - Piles, Pleurisy,  
Only a change of system will or can a change  
in the effects of medicines - Infants, old age -  
2<sup>d</sup> Divers. of Sex. Sh<sup>d</sup>. study the pecul. of sex -  
3<sup>d</sup> <sup>4<sup>th</sup></sup> Temperaments - Peculiar temperaments



subjects persons to special diseases  
 5<sup>th</sup> Habit - has great effect. & is imp  
 to be attended to - but abstin. small dose  
 when can take large ones - Corrosive Subl.  
 3j m be taken - Opium ʒ 15 Swell at base  
 Dr. Bouquet in 24 hours in colic - 100 grs  
 besides ʒij of Ether. Castigation to free the  
 effects of opium in many instances - The  
 6<sup>th</sup> of Season - has powerful influence  
 more fatality in disease at one time than  
 at another. & sh<sup>d</sup> be stud<sup>d</sup> -  
 7<sup>th</sup> of Climate - we study this - & wherever  
 changes residence we find change  
 Should therefore study of all these things.  
 Nos. Causa, vita brevis - Hippocrates -  
 False deductions are to be drawn from truth.  
 There is that kind of knowl: we is obt<sup>d</sup> by  
 long practice without a teacher: & must dep  
 us well as ourselves as on the work preced  
 ed - Med: education or profession can be  
 obtained by one man alone - No one man  
 can study the operation of all medicines.

No such thing  
 properly speaking  
 as false opinions  
 & sh<sup>d</sup> be strictly adhered  
 to truth.



Let us adopt the principles of our preceptors & use  
 their medicines - enumerates them - 9/10<sup>th</sup> of  
 the articles might be disc & still more than  
 sufficient - I shall pass over many articles &  
 if not from respect to other professors sh<sup>d</sup> limit  
 it myself to but a small number - In our  
 National Pharmacopoeia sh<sup>d</sup> be independent  
 I think for ourselves & not limit ourselves to  
 indig & contract views - Many articles w<sup>d</sup> be  
 cultivation in this country - Poppy, Rhubarb,  
 Pulver Christi - others can be cultivated as Bark,  
 all this shows the necessity of industry & ob-  
 servation to a good practitioner - vide Visio  
 of Don ~~Porto~~ <sup>de Sae</sup> ~~Quedon~~ - I give a ludicrous de-  
 scription of the Physic: upon &c of his time -  
 & concluded with the adage Pas est at hoste doceri.

Sh<sup>d</sup> domesticate  
 foreign Medicines

Great extent of  
 qualif. & use of  
 in a Physician.

D. Gibson Monday - 10 o'clock -

Wounds - Neck & Adjacent Parts -

Are made with a few days - owing to impet  
 impet - One apply can press - 1<sup>st</sup> Object is to  
 contain and hem overhaze - Sanoff. sometimes in  
 Most simple wounds - are Incised Wounds -



Can suppose wound ~~fatal~~ fatal but is so  
 Commonly the superficial thyroid & lingual  
 arteries ~~fatal~~ are wounded - not fatal -  
 fainting stops hemorrhage - When hem is  
 stopped gen cured - Great nerves owing to con-  
 nection with blood vessels being so near -  
 When recurrent nerves - Aphonia - When  
 below the Larynx, Thyroid gland gen cut -  
 very dangerous & gen fatal - Sh. cut down  
 & tie the sup & inf Thyroid arteries - Pells  
 Wounds - Trachea & neck Oesophagus - When  
 in the Trachea danger of inflam - & Oesoph  
 want of food - Elastic catheter - Some say open  
 that wound & Oesoph are fatal owing to  
 water being cut - but is so -

Treatment - No benefit from sutures in  
 trachea or larynx - just irritation prod by wound  
 Sh. be brought together by proper position &  
 muscles & intest by the interrupted suture  
 In Manicures, Sh. secure the position in the head.  
 If too far back or forward, equally improper.  
 In Manicures - used a large shock with a hole  
 for dipping - Strait jacket - very successful.



Prevents deformity -

Wounds of the Tongue - join to the teeth - in  
maniacs or convulsions - Treatment diff - unless  
large no sutures - if recep - interrupted - Potts  
machine used in a lady with Epilepsy - Tongue nearly  
divided - Prevents further effects by wedges - Made a  
Circum Bag & fastened by wire curved under the  
chin & by tapes behind the neck - Case - Balt. Willm  
house - Tongue adhered - jaws - separated loose - Requires  
practical experience to proper treatment.

Wounds - Chest - Not recep fatal - More liable  
to punctures & penetrating wounds - Lungs are exposed  
to injuries - Sometimes do not penetrate the chest - dis-  
covered by discharge of air from the wound - Change of  
position sometimes prevents concussion - & prod. Emphyse-  
ma of the integuments & muscles prod. out em-  
pyema - Sticks left loose - Adhesive plaster & comp.  
Wounds - Ext - Lungs not so dangerous as when  
internally - no prove fatal from effusion of blood  
Also with: suppur - stuff of matter & hectic fever  
& death. Hemorrhage a terrible spect when  
he taken up - When into the cavity of the lung - Hef  
etc



When anxiety. &c. - Sh<sup>d</sup>. Keep open the W.  
 & evacuate the blood & open the wound as  
 a knife w<sup>l</sup> not practicable. When too high  
 sh<sup>d</sup>. be made between the 7<sup>th</sup> & 8<sup>th</sup> true ribs or  
 3<sup>rd</sup> & 4<sup>th</sup> false ribs. When from intercost. art.  
 can b. taken up. sometimes both lungs & L.  
 A. wounded & ribs driven into the lungs -  
 often fatal, tho' not always so. Can b. M<sup>o</sup>.  
 so. More dangerous when blood is eff<sup>d</sup> in  
 cells - lungs - & spits blood in streams -  
 prod. suffocation. Titment, copious & s.  
 & quickly repeated, or must die only  
 by efficient & active rem<sup>d</sup> to be saved.

D. Have Monday a Nov<sup>r</sup>. 22<sup>nd</sup> 1819 -  
 12 of clock  
 Suppose <sup>entire</sup> northern <sup>part</sup> of the world  
 fair in the Gulf of Mexico. As air is raref<sup>d</sup>  
 its capacity for heat is increased & its vapour is pre-  
 cipitated - Rain & snow are sources of heat.  
 Vapour of water is the constant vehicle of heat  
 from the tropics & poles - Why is there so  
 great a difference in the climates of Europe  
 & America - Owing to there being no land



beyond the 70<sup>th</sup> degree & in the formation of ice much  
caloric is given out & equalizes the temperature - Climate of  
Pekin & Phil<sup>a</sup> the same changes - &c - Effr - to explain  
the effect of condensation as a moving power - I attend to  
the construction of the steam engine - Blair Evans' high  
pressure engine - Bolton & Watts - When a gas is rarefied its  
capacity for heat is increased & it robs the vapour which  
exists in it of its caloric & cold is generated & water pre-  
cipitates - Waulfe has combined both engines - Effr - to  
promote the circulation of heat - Effr -

D. Coxe November 23<sup>rd</sup> 1817 Tuesday 9 of Clock  
Should study the Physic properties of Medicines in  
order to become better acquainted with their Medicine P.  
Instances, Carpenter, - The best method to attend for a few  
months in a pharmacy - Many physicians are remarkably  
deficient in the knowledge of medicines - should study Prac-  
tice Pharmacy - An enquiry into the best method of  
Classification - great variation & fluctuation in the  
properties of medicines - Mat. med. I saw only Camphor  
saw nutmeg but also prepared <sup>formed by art</sup> as sassafras, bol. alk  
is obtained by distillation from bones - We also possess  
compounds resulting from opposite ingredients -



as neutral salts, &c. - Plaster salt. Sulph & Pot.  
 A. Methodical arrangement is extremely useless  
 in every branch of science & practice: a Physician  
 It w<sup>d</sup> perhaps have been better had no change have been  
 made - The road to knowledge is a circle having no  
 beginning nor end - no matter, where we commence  
 will in time complete the circle - Alphabet,  
 Mineralogy, rendered very difficult owing to the  
 number of names employed for the same sub<sup>st</sup>:  
 Numerous Methodical Arrangem<sup>ts</sup>: all merit  
 all defect. - Some to divide the M. A. in  
 3 Kingdoms Min: Veg & Mineral - Others  
 Alphabetical arrangement - only useful in ref-  
 erence - Some articles belong to every class.  
 as mercury - Opium also bel to many class-  
 various other places, superfluous to mention -  
 That arrangement best where medicines affect  
 the system in the same way - sanctioned -  
 Articles may be required in a 3<sup>d</sup> way  
 Natural History, Medical history &  
 Pharmaceutical History -  
 1<sup>st</sup> Natural history useful in many cases



Is however not of much consequence in minerals - 34  
Shall chiefly depend upon Chemical history. Their Medicine  
History can not always be relied ~~upon~~. The nature of  
ferments in disease - In this way can discover the  
<sup>the</sup> properties of medicines - & the only be known from  
their effects - been told. The Pharmacological  
History comprehends the various change which oc-  
cur, & its possibility to - Before proceeding must  
ascertain in what the nature of Diseased Action  
consists - Man preeminent among all animals - converts  
substances by digestion to his own growth - If waste  
can be <sup>be</sup> decaying in & when time for derangement  
so it is in the Human body & requires the pre-  
servative principle to restore it - Continually strug-  
gles against the cause of death - Health consists  
in the harmony of the different organs - & derangement  
produces confusion in all & is the object of study in  
the Physicians - All disease consists in disorganization  
or disorder - all the & Physic world, similar - By  
the nature of man the seeds of destruction are  
planted in his frame & when these are no  
longer governed by the vital principles, death is



Sanction  
perfect to  
law as or-  
ganization  
is perfect -

Disorganizing  
action not  
perceptible  
owing to the  
imperfection  
of our senses.

Action is  
to be in the def-  
inition and  
classification -

Disorder must be produced - There must be  
a change in the organization - Disease implies  
disorganization & our remedies serve to restore  
this. Proof is that if healthy action results  
from healthy & healthy organs, disease im-  
plies from disorganization - In dyspepsia  
disorganization in the place in the stomach -  
To the eye there is no appearance of disorg - but owing  
to our imperfect vision - even in disease  
the first effects will not be perceptible, until af-  
terwards - <sup>as splinters de-</sup> From these we are warranted

in the conclusion that no diseased action can  
take place save disorganization - It is proper  
to state to the disorganization produces  
diseased action being due since  
Healthy action is an agent in contradiction

D. Gibson

Emphysema & Empyema - are in  
the other part - symptoms of emphysema -  
Caries, 2 - like Bell's Marrow's - lungs -  
few collapse except w/ adhesion - Cure  
difficult when lung wounded - 2 or 3 methods -  
Purification - Dr. Hunter recommended it - Henry Temp



If they do not succeed must use Paracentesis - May contend for  
the merit - Open the external wound or make a new one - may  
introduce a tube - Bandages useful in mild cases - Double  
Roller - round the chest - Only 2 pen: Punctures, Pneum  
Empyema - Chest lilla - Come Shattered Ribs, Symptoms  
Treatment - System supported - Tonics of good suit - to obviate  
debility - When matter collected must resort to operation -  
as low as possible & where it points - It is not close the opening  
Bougie, Tent, Cannula, until matter decreased - When mat-  
ter is immixed through the substance of lungs, much more  
dangerous, few caused by Gunshot Wounds - Treatment  
diff - Some tents, some setons - both may be used by a  
judicious surgeon - It is kept open the wound until ex-  
traneous matter is discharged - Prevent tents entering the lung  
by ligature round it communicating internally - Seton  
is a more doubtful remedy - It only be passed through the  
muscles covering the ribs - I

Wounds - Heart & Diaphragm - do not say: aid -  
Wounds - Sternum - Trachea - Can by Mortar



D. Hanes. Tuesday -

Experiment rarefaction of air in Globe diminishes the weight of atmospheric air - Montgolfier's balloon exemplifies this - Astronauts carry up additional weight to counterbalance the loss of air - Experiment - Effect of steam in producing heat - vide Henry fig 46 -

of Specific Heat - Bod acquires the common temperature of the medium - Water by weight - Bod. absorb different quantities of caloric & owing to different capacities for heat - Water glass, copper tin - 1000, 187, 30.22, absorb different quantities - Water 28 times more than mercury by weight - In equal bulk double the quantity of mercury - The same body has not under all circumstances the same capacity - Change when solid & fluid & fluid & gas - owing to increased capacity - Effect heating water & vap. owing - to the attraction being overcome by heat - Thinks there is a chemical union,

There are 2 modes by which Caloric is conducted - by conducting process & by Circulation - one peculiar to fluids - No two bodies of equal conducting power - Metals are the best conductors - Examp heat



46

Suppose different strata of ~~substances~~ particles - add one particle of heat & it combines w<sup>th</sup> the first particle, add another & it goes to the second - & in the same proportion one particle <sup>of matter</sup> will contain one more particle of heat than another, & when one receives an additional dose it prints with it to the next - & when the capacity is satiated the temperature of all the particles <sup>becomes</sup> equal - There is a mutual attraction & repulsion - Count Rumford objected to the materiality of heat - that in boring a cannon more heat evolved than the metal can contain, but the light of a candle no objection to Newton theory - Atmosphere decreases in inverse geometrical progression  $3\frac{1}{2}$  miles is half as dense,  $\frac{1}{4}$  in 7 miles - If the density were equal throughout to that at the earth's surface w<sup>d</sup> be but 5 miles high - Even in the rarest atmosphere <sup>produced in an air pump</sup> the density at the earth's surface w<sup>d</sup> be double - The conducting power is very imperfect implies so that Count Rumford doubted whether the cold conduct heat at all - He observed that when heat was applied to the top of a tube containing a fluid it was not communicated downward according to his experiment - But when to the bottom it was rapidly communicated



42  
And he inferred that it was only conveyed by the conduct-  
ing process & that no one particle communicated  
heat - Difficult to prove the contrary - Observed by  
Murray by using a vessel of ice - & proved that the  
caloric did pass down & proves their slow conduc-  
ting power & principally becomes heated by circulation  
Mr. Latrobe - water remained cool tho fire continued  
for many hours to the middle of a tube - Expts. sitting  
ascending the tube - Experiment - Air thermometer made water.

D<sup>r</sup> Coxe Thursday Nov. 28<sup>th</sup> 1819.

No disease can occur from disorganiza-  
tion - Brain divides itself into 2 classes  
Excit. or Defective action - Must en-  
quire into the force by which it is regulated  
Only 3 kinds of action - Vital, Chem. & Elect  
Vital power constantly res. other sections  
their principles - Healt. infl. the eff. of med.  
to be in Convulsion Dublin &c. Can take a  
few drops of Quinine Altho some detrim-  
ent as it is noted in by Vitae, but in  
large dose it gives it Chem. Action  
The Nature & Parts to which it is applied



[illegible]



All that can act by their power.  
 Doac. of all it are ult. Res - so are Stim.  
 Der Princip. That all used w<sup>l</sup> excite any ac-  
 tion in the Stimulant - only sedative by co.

Shall divide into Stimulantia & Sedantia - & under the former all med.

Should attend to dietetics as it are an it  
 in eff. rem in dis. & it, can sep it in  
 diet. Med. Is it of less import to be able  
 to prescribe diet, the medicine - We can w<sup>l</sup> just  
 as it w<sup>l</sup> - It rich or ourselves next the  
 subj. - Can cut large into it consist of  
 reg. - Is more for rules necess. - & the  
 course of the subj of diet & regimen dist.

Divis ~ That - Med. - It is a diffic.  
 to Locate medicinal<sup>any</sup> partic. class - Mercur  
 de - Part Emec<sup>in</sup> - em, cath, & Purgaf. & Mus  
 it, into it in med. - A great Class

Stimulantia & Sedantia - & Præparata

Under Sedan - As, Emec, Cath, Diur, Diaph, Purg  
 & Demia Phlegmantia



Incertant - into Stimulantia & Nutritional -  
 And: Stimulants - may divide into Stimulants <sup>proper</sup>  
 & Tonics - and the first <sup>or</sup> Stimulants <sup>Stimulants</sup> proper, Centes, &  
 & Marcot, Tonics - Tonics <sup>antihelmintics</sup> & Astreng -  
 Shall next Antitith - & Emmenag - as

+ No one at all  
 proper called

Antitithis as will  
 not dent the stone

as to Antihel - entirely superfl. as per Antitith

Many persons & dis. Worms in health

but & a cause them for hurt - Live in the

same light - We say the case & enter as a

eye surface - Worms can take up chyle

as they respire in the <sup>large intestine</sup> & in a chyle

there - Emmenag or suff. in the <sup>large</sup> Caton

Best for deep & for system - & indic

of rel in aff. in sea system - At b

the Class is uncertain & operates princip

upon other parts - Madia, Sencha, & Ergot,

only 3 articles wh. L. aff. be suff. to have pec

ity - in equal prop. enters other classes -

as Cephalalgia, Haemipic. Hepatic - &

in in prop. as the Uter is not spent to

life - & in open & Uter the it open & Syst

"These animals  
 are more found  
 in some than  
 others."  
 Only one thing  
 present makes  
 it that is found  
 in membranes



article

It are in so many subdivisions, only perplex.  
 & I could try some ample suff to end co:  
 First *Evacuants* <sup>& reg. it could suff</sup> - ~~& Com & Heffer~~  
<sup>under its various subdivisions.</sup>  
*Legants*, then *Stimulants* &  
 then *Nutrients* - Then *Pharmacy*,  
 then *Med. Jurisprudence* -  
 Dr. Pison -

Wounds ~ Abdomen - Wounds ~ vice - also  
 in way of all Wounds - Ave: could reap-  
 fatal - Air per suff - Dagen - suff - if Monro -  
 in or suff to consider - too far - Dr. J. Bell  
 opposed - Air ~ abd. or ex. infl. - & in the  
 case must mention *Wounds* - *Wounds* - den-  
 that air is harmful - *Inflammation* - in day  
 off - prod rapidly - *Peritoneal infl.* in 6 to 8 days  
 Wounds ~ Stom. & intest. also very danger - can  
 to appear in the contents -

Wounds ~ *Partic Parts* & 1<sup>st</sup> ~ *Stomach*  
*Symptoms* - *Treatment* - *Diary* - & to  
 get ext - *Diagn.* of *Stomach* - & suff - by *Glysters*.  
 - *Wounds* - *Stomach* - *Recurrent* - *Wounds* itself  
 reg. *Stomach* - *Attention* - When it comes in rest of



Attach the edges ~ Stomach to the surrounding muscles -  
& cellular membrane - Best method - Not necessary -  
Orthus - soldier - Pellicanis carried 2 of his wounds - Seen him, friend  
of Bohemian - Foundest Hotel die - Can afterwards -

Wounds ~ Intestines are so dangerous ~ a stone & can stick the  
interior or the safety - Except a lead at the bill & plane ducts  
enter are generally fatal - Symptoms - in cut: much - feces & ext wounds  
in Blood dribble - by the anus - Difficult to ascertain - as intest. recedes -  
In Contused wounds - Symptoms slow - in 10 days - feces -

Mercurial water can be washed off prof. been - also suppuration  
Can by Litter - Wilsons, Snows, Daniels - Treatment in both cases -  
Similar - Copious Dis - in 1 f in wounds & intestines - Flood, soft -  
if small, as use of stitches - When large open in stick them together  
Different methods - Object is to procure adhesion - & sh. be fastened ~  
extensive wounds & as this closes 10 w. it in the intestine -

Whichever divided introd one within the other - & two or 3 stitches - &  
take a wound after - Sloughing toward food & then Antif. Am.  
When incision not needed but only protruded - sh. be returned  
it sound & healthy - if operative, ligature, & Knife -  
Ligature best by double ligature - Pastrovapha - <sup>best</sup> Darter & Quilled  
Woundline, Gen: fatal - Lacerated by litter & it causes a fatal -  
Symptoms as after the event - Pain sickness vomit bil blood per the



Wound - belly fatal - from inf signs - presents Treatment Copious W -  
Cancer -

Wound - Gall Bladder - also fatal gangrene -

Wound - Spleen - few fatal - also Pancreas -

Wound - Kidney is so dangerous - Danger fr off of urine

Wound - Ureters is dangerous - as urine flows ext - & other parts  
injure - in Wound - Kidney - as low diet, & antiphlogistic

if not suppuration - when large vessel wounded & eff - in  
enlarge & eff -

Wound - Bladder. Very often serious - depends very much  
owing to Position & urine - When urine passes out exte -  
re is danger - Case by Dr. Willison - W - London.

D. Hare - Thursday Nov. 26<sup>th</sup> 1814 -  
12 of Capt.

All metals are susceptible of bulletin -

Modification - Atomic theory - is that all bodies  
combine in volume - as to the ratio of their bulk &  
combine by measure - only and another form -

Water exception to the Gen Law of expansion by heat - viz 39°.

Appearance to be a specific proof: - Almost no person  
Aqueous Animals - Temperature - Earth 54°.

Radiation of heat - Leslie - best conductors are the  
most ~~conductors~~ radiators - Room is at 1/2 the distance  
of the radius & curvature -



D. James - Thursday Nov 25<sup>th</sup> 1849 - 49

Males may sometimes be mistaken for females by the clitoris being tied down so as to resemble the clitoris. Testes resembling the labia - relieved by making an incision under the gland.

Imperforate Hymen. - see a att to until 15<sup>th</sup> of Month. Retent. dec by it some resemble pregnancy. - Seldom extends bef. the Mucosa Urinaria - May also resemble polypus or prolapse - tumor - perineum - gives pain in passing feces & must. convulsions - It. make an incision & discharge the fluid wh. resents polypus - D. Decum. 4 lbs of the loch fluid - It. be kept open by lint - Case Jul 19 - new: menstruated, weight, abdomen enlarged - on exam - vagina tumor projected bey. the labia - membrane col - vagina - fluctuation - green - Puncture - 2 qts of brown fluid discharged no fibrine - Cure by Emmet's, mistook Hymen for tumor - 2 quarts - Benwick 32 lbs - Sometimes prevents connection & cervical incision can be made - Not freq in the Co. <sup>Inflammatory Dissep.</sup> Pruritus Vulvae or itching - Subject to Hemorrhoidal women & pregnancy very common - sometimes induces fever - when conception - vs. laxative, sedatives, diet, Sol Lead Blister on pubis - Cures cured by rug scrub.



Case Sol of tobacco - Borax in solution useful -  
 D. Deum - cold water - D. Deep - warm water  
 can be tried in succession - Can all failed until  
 Ptyalism - M fr unit & bladder bougie - Foreign  
 excrescences in the Uterus is a frequent cause of bou-  
 gie almost specific - When owing to insects Ury. Mar  
 or Cal tied up in a rag & dashed - When from  
 Ovarian - Calan or Dolich Pruritus - Inject of  
 Common salt or oil Turpentine & with inject & bag -  
 Warts - Aqua Ammonia & Fe Canth & Iodine &  
 Subacetate of Copper in equal parts & useful <sup>in men also</sup>  
 Lucina Calustic &c - Sometimes Scissors neces-  
 sary to Adhesions & Vagina from Ulceration - sep by incis-  
 ion & tears - When high up & I cant see using the  
~~Scissors~~ - Narrowness & Vagina, rare, small  
 injections, or sponge sent best - In pregnancy we  
 can be under any apprehensions as the parts are always  
 dilated by the kid & child.

Vagina opening into the Rectum - Portae - but ask.  
Deficiency or Defect of the Uterus - 2 cases in this  
 city where imperfect - & operation useless - & it? not  
 make incisions too high up -



Protrusion Vagina - as fr wh ext open very large -  
 sometimes complete & or when present - Extends 5  
 inches from the labia - When long insect has been  
 infl & ulceration - Vagina somet very short -

Large tumors - Vagina somet small at other large  
Imperforate or Uteri - 2 cases by Morgagni - where  
 or Uteri adhered - Chambers - case, when the w suppress  
 of urine, owing to imperforate uterus - Diet: 32 pounds.

Best mode is to intro the trochar <sup>cautegemous</sup> towards the fundus  
 uteri - Case by Samuellic where imperf: or Uteri, & labium  
 could not take place <sup>until several incisions were made</sup> - Case by Dr. Cathrall where no

or Uteri & was propelled out of the vagina - w: incision &  
 child was delivered - The or Uteri was subseq fund, & w  
 previously owing to Antiversion & w not bro! down  
 by labor -

Chevalier Case of Imperf Uterus - Women  
 lost marriage, pain & no menstruation, virgine Uteri  
 was closed - Divided or twice & fluid blood discharged - 8 yrs  
 afterwards the same operation w repeated -

Fungous excrescences in Vagina & Uterus - Sometimes  
 called polypus - 3 divisions: From the fundus, or cervix  
 & or Uteri - generally fleshy - & increases rapidly -  
 Symptoms - weakness & pain, Leucorrhoea, irritation



in all parts connected w<sup>th</sup> the Uterus. Diff.  
 Leucorrhoea - H<sup>o</sup>? Discrim. between pregnancy -  
 Menstrual flow, or due enlargement, Abdomen is irreg.  
 When large - Use a forceps - or finger & noose with  
 Double Canula is the best - By the ligature is the  
 best mode. It nev<sup>er</sup> use much force - but not  
 twisted off - When polypus passes into the Vagina it  
 is more easily extracted - Does not prevent conception.  
 Cure Champier. bore children - Must not mistake  
 polypus for prolapsus Uteri - Small be - disting.  
 The Prolaps is dist<sup>ended</sup> & passes out of Uteri - a  
 polypus more irregular - softer & less sensible.  
 D. Johnson in polypus probe can be passed from  
 the vag into the uterus - In Prolaps bladder displ<sup>aced</sup>  
 in Polypus uterina - Causes peculiar constant  
 Affections - Irritates Ureth<sup>ra</sup> & Neck - Bladder  
 filling in diff<sup>erent</sup> Cabans - & th<sup>at</sup>? be watched - When  
 they give way must use Elastic gum catheter - until  
 parts get well - which soon happens -

Excrescences - Urethra - resemble calculi - When  
 kept up diff<sup>ic</sup> to disting - w<sup>hen</sup> the calculi - Ligature  
 & Boagie after extirpation - Inversion Urethra



when slight bougie, when great, cut off - no experience  
various state in use than - Prurif, uterine lot - & bougie.

Dr. Coxe, Friday, November 26<sup>th</sup>, 1819.  
of Sedation.

{ All subst in be caused stimuli & are only relative  
sedation - A, & the ven - in course any more -  
Shall meet off, in den the exist of Sedation -  
There are many thing wh prod death induced  
to m & in his whole the stim - or not - Effect

Prurif is the  
only sedation if  
any, & even that  
little

Sulph Hydrog - Prurif acid is a very powerful  
medicine, obtained from Peach leaves - Formerly  
found fatal as cordial in many instances -

Hydro, Nit, & Carb, can be put into its comp  
& Iodine is also supposed oxygen - But Coxe thinks  
Hydrogen an acidifying principle - as Iodine,  
Fluorine, Chlorine - Gay Lussac 1<sup>st</sup> discoo its base  
a<sup>+</sup> Carburet of <sup>Nitrogen</sup> Hydrog & converts into acid by  
combining with <sup>Hydrogen</sup> ~~oxygen~~, & therefore there is no  
subst of itself an acidifying principle - <sup>P. A.</sup> Affen  
to be entitled to the name of Sedation - Ut & den  
no - cerams - peach leaves, bitter almonds - &c - All bod  
in which Nitrogen enters, are powerful substances

or Cyanogen -



Scheele's Pota-  
 formed by adding Vibe Magnesia or Prussic Acid - bel Hydrocyanic  
 red or of Mer-  
 to Prussic of Acids - He recommends it in Dis - Chest & Phte P.  
 Iron - Prof requires strictest caution as to all poisons -  
 of Mercu: it requires strictest caution as to all poisons -  
 formed which by being heated Exp 1: Killed & no trace of muscular action  
 in contact with sulphuric acid - It is useful in tetanus - When injected, instance  
 of iron - Salts of Mercury is formed. At kn as y b little of its medicinal prop-  
 by distillation. May find it useful in short dry cough & cold  
 the Prussic acid in new & chronic cough - useful - Used Scheele  
 could over in combination with the new & chronic cough - useful - Used Scheele  
 water - from 2 or 3 in  
 Gay Lussac of Prussic acid in 10 grs. in 24 hours - Palliation  
 tained it from in Consumption & thinks Phte check -  
 Prussiate of Mercury by adding their  
 into Acid & passing the vapour through a water  
 bottle containing  
 Mercuric acid  
 done of P. & C. Phobia - Case Poison - Rattlesnake. cured  
 2 or 3 grs were given to 10 or 12 in 24 hours -  
 it by giving grs every 1/2 hour - If then the an-  
 c b fine in such cases, 1/2 lb to 1 lb Pr Acid in  
 b fine in Tetanus & Hydrophobia & also Hoop-  
 cough - Places it in Head of the Subacute  
 Letter of D. E. D. Smith on the Prussic Acid -  
 Dr Smith began administering with grs iii in  
 24 hours & extended to 10 grs.



D. Gibson - Nov. 26<sup>th</sup> 89 - Bridge 100 yds

On Gun Shot Wounds - are a sort of Lacer or Contusion  
in prop & veloe, size or shape. Power differ in the  
Mammels or Cellular Tissue - Lacer get into a run into  
it into a dense one - Wound of a passing ball supposed to produce  
death - doubtful - Not in pain - owing to velocity -  
the destruction of vitality - More death - white - When contusion is  
added to incision less pain - When veloe greatest pain least.  
Compensative effects on different parts of body - The course  
& what effects it - seldom direct - per Abige - Red line under  
the skin indicates the course & bullet - Mr. Callah ball did in  
2 parts - Inflamm in G. Mt. Wounds is slow - Sloughing takes  
place - ball forms dead tissue - Disch. at 5 or 6 days - Do in infl  
so soon or read as old wounds - Different parts differently  
affected - Want of dispos in flesh W to infl constitutes the  
peculiarity of these wounds - In the Intestines no fever & wound  
for several days - Very foreign - Happens to other parts - Arteries  
Cause by Cholesterol & Hemorrhage & death from Sloughing - Vessels find  
by the center & ball - Lacer & Stitches in free of G. Mt. Wounds  
& Exfoliations - Sometimes lasts during life - Another pec of G.  
G. Wounds are pain & trepidation & sometimes it comes on  
from this commotion - May recover - May go off



& sometimes diff to raise - being to the shock commu-  
cate a nervous system -

Treatment - 1<sup>st</sup> When first received - & 2<sup>nd</sup>  
of the manner in which the injury is to be treated -  
The 1<sup>st</sup> thing is to suppress Hæmorrhage - is also large -  
should lay open the wound & take it up immediately, the  
not part from the operation, by tourniquet, as being  
fatal - If cut down boldly & tie up the vessel - Next  
thing is rest - If no hem - must then examine the state  
of limb & the cause & ball - Many refractate ex-  
amining P. S. wounds - But I think it necessary - &  
shd. not hesitate to cause pain to relieve pain -  
Examination should be not commenced aft the accid.  
as more bruised & in pain - The Circ. sh. be  
Exam. necessary in these - 1<sup>st</sup> When splinter a bone -  
or injury blood vessel - & clots or maddening run -  
wounds - shd. remove them - There are also to be used  
Exam. & infer when cause & ball is evident - when  
it enters any important cavity, improper, & shd. be  
cautious in<sup>2</sup> examinations - When Exam. is deter-  
mined - the finger is best - of it diff subst - Fract bone  
det by spec - Bullet wound & Place Cloth - also spec.



154

~ Ovaries - When beyond the reach of finger - Common  
Gunshot ~~wound~~ probe of pure silver is the best: or  
Urethra wound - Metallic instrument preferable to bougie  
& vibrates - Hunter says it is improper to dilate wounds  
& puncture S. R. Wides - Dr. Gibson thinks that in every  
wound where extr. bod is lodged it be removed at  
once - Dr. Hare - Alfieri - during part - Section

Dr. James Friday 26<sup>th</sup> Nov. 1849 - 3 1/2 o'clock -

Leucorrhoea or Fluor albus - common in Uter. Wgs.  
Very troublesome, Hyster, Leucopleg, Dropsy, vitiated appetite  
& Depressed habits. Not Is a kind of mucus or serous  
matter differs from water discharge & arise from both of the  
Low habits must suspect - Does not proceed from the  
menstrual repels - Proceeds in Lacuna Vagina or Glan  
Structure & uterus - It frey - thin men - & uterus -  
Causes Plakora & Debility - 1<sup>st</sup> full habit good camp-  
& clear skin - 2<sup>d</sup> pale yellow - & - Proceeds gradually  
colours is sometimes attended by excoriation - It means  
one subseq - It ~~not~~ is mistaken for gonorrhoea - by  
order urine is so great & in pain - More slow -  
periodic - Treatment - veg & Hopie acts well used  
without effect - In Debility Tonics & Stim - kind



58 - Injection: Lead, Alum, Gall - & Saffron  
 passed into the vagina infus with astring mfgs.  
 Dr. Clark Emulsi bis ut ter ~~beboomed~~.

Red oxy Iron  $\text{zij}$  }  
 Aloes ———  $\text{zj}$  } mft Pil; ter die -  
 Opium ———  $\text{zss}$  } this is given - Alum & Honey  
 of mercurial cause sometimes effectual -  
 Mr. Robertson gives ~~mercurial~~ cantharides -  
 from its use in fleet - Renders the m. cheerf.  
 & mutes the sense of debility. Checked the diarr. in  
 fleet - & tried the Caustic in Fluor albus supposes the  
 circumstances precisely similar. began with  $\text{Zij}$  of  $\text{zss}$   
 in  $\text{Zij}$  Aqua. Table 1 per full ter die - & increased  
 to  $\text{Zj}$  -  $\text{Zij}$  Water -

Prolapsus Uteri - vel Procidencia - Distinction  
 one external - the other not - Procid. vent. - resents  
 an old tumor present external - the os. twice - per  
 Ovar. - violent efforts, heavy burthens &c. - Much  
 walking - also hasty ext. & Placenta - the liable to it  
 who'd to my child & the m. get up too soon -  
 The Uteri acts as astr. matter a vagina & causes  
 Fluor albus - Very incurable since the early off of  
 Pregnancy - In large pelvis - The os Uteri h. to pushed



thro' the Vulva - Being to relaxat or debilit & Lymph  
Must examine per vaginam - & in an erect posture  
lean over the back & chair - as can in a recumbent post.  
When protrudes when the urine is suppressed -  
When the Uterus is protruded shows its native colour  
& becomes covered with cuticle - & sometimes mistaken  
for hemaphrodite Case - ~~Le Sage~~ Savinard - Home, Phil.  
From where resembles penis - Brief & at times. Most  
mistaken for the Urethra - In the Uterus transversa white  
& Penis perpendicular - Hottentots - generally enlarged  
Mymphe & not a pro - Boecklin.

Treatment - To return the Uter & Vagina to it -  
& retain them in that situation - Wh. dig. Ws, lax,  
& low diet - When not must use Pessaries - Globular  
ought to be Silver gilt - Used by Physicians & Surgeons - Dr. Jones  
recommends the Oval pessary - & also thinks the Globular  
no good as any - Oval - ~~the best pessary~~ - Spongy pessary  
has been highly recommended - Sponge is to be cut oval  
& wrapped round w tape - N<sup>o</sup>. have 2 - & changed every week  
It occasions no pain & will expand, pliable & easily  
intro - absorbs secret - & in ultimate suppuration the U.  
Shd be dipped & moist. w wax & oil - finest sponge



60  
G.P. Shy to the system - Steel & tonic - cold se.  
Decoct of Black oak bark - intern & in cyst.  
When early in pregnancy not necess to do much as  
rises after quickening & is cured after delivery -  
Best Subject - Sulphur Zinci  
Inversio Uteri - 2 Cases - Weight of Polypus  
& Pulling - Placenta - Symptoms - Sometimes  
complete inversion - G.P. also endeavored to return.  
It has sometimes been cut off by ignor. midwives -  
Professor Osander - has perf excis & Uter 9 times or so.  
Many cases wh it is imposs to red ~~it~~, it is  
cut off - But dangerous as bladder is apt to be  
included in the ligature - Ambrose Pare entitled  
a first of - Cancer Uteri -

Dr. Case - Monday Nov. 29<sup>th</sup> 1819.

Have been I divided the Materia Medica -

18 - most prompt &  
gen couchant - { Of Bloodletting - No inf use of  
evac the syst. The' neg art is the  
re parturition in its effects - & more  
united than Emetics &c - It is the  
quintessence of evac removed - Tamest  
stimulus is excit - Syst can be reg



as

Do not know a powerful rem & it be considered - It ext  
its origin -

as a curative instrument - & it vibrates most -  
May be carried to an incalculable extent - It is the  
very any records of antiquity - I can't the ascent the  
causes w<sup>ch</sup> led to its use - Hippopotamus used  
it by rubbing of a thorn bush - Used in every  
part of globe & against the cancer - With  
Stout - Sangrado - still remains - D. Phil. Keck  
ett is the person ridiculed by Le Sage - Sangrado is  
a Doctor sine degree - It has been useful to  
prevent disease - In Spring to free phlegma -  
Even the house & day govern its use with some  
originated with you - Allit stinging or illit bed -  
adder hypochondriac - Doubtful whether phlegm  
is an apol & use & benefit - Abstin is an  
better - Phlegm indicates less hemorrhage - Sweet  
sometimes used but in unit aft w<sup>ch</sup> - As a  
Prophylac is very usef in use of vital parts -  
Hygine & brain - Suffer & menses & Men  
or hard disch - usef & not be used the nec  
in every age disch - All prepared as in infancy & old  
age - D. Black did use it & much - & not

Has been used  
as a prophylac  
Lactia

May be used  
in every age



be used as well in these stages as in every others.

B in all cases, can be prof- & the system.  
Even in few hours.

What is the  
most prom-  
inent effect  
of B.S.

The in from charact is to red the inod  
action & system. But in be regul by the  
judgment & practice. Faintly must ind  
it by a very small loss - & in dep upon the  
quantity can in tale the cause. The eff  
is not only momentary, at other conat

Does venese-  
ctomy act as  
a stimulant?  
In affections  
of the liver & spleen

of hour - During this time the exhalants &  
inver, even with the blood is retreat & fresh  
If def or - debil it in als red blood in  
discharged. W<sup>d</sup> in a p only for this.

The Amount of B. drawn in be estim  
by diff circumst. A large B. is only a relat

What do you  
mean by abt  
a large quan-  
tity of blood?  
altogether a  
relative term

hem - What is legim I w l me in another.  
It is also to be prof to open ourselves - as the  
pulse w b in a leg &c. - Country pract h  
in the cases the ado. as a choore time & quant.

Do Symp result  
in abt 2 small  
quant of B?  
C w acci for it?  
What is pec.  
& unsupplanted  
cold sweat

Large quant h b drawn - wh in seem to  
inf in wh quantity the syst w b.  
Pallen detrs - 6 cotytle or 48 ounces -



D. Phys 175 in 10. D. Dances 90 y at 100.  
yng W. 1020. Vs. Every Day & every 10 days for  
14 months. A Wagon in <sup>the 2 yrs.</sup> 26239 lbs  
Blood in fcy bl loses its characteristics, loses  
its coagulated. When bl is drawn in fcy  
it diminishes the morbid act. & it is  
due to Parox & at its commencement.

What is the  
most proper  
time for bl?  
D. y never vs  
in Intermitting  
Yes in Chronic.  
D. y never require  
it.  
D. y bl in Con-  
tinued fever?  
Why did Cullen  
avoid by using  
Synochus?

In Intermitting the is 10 fcy - not very  
unf -  
In Contin fever is to be used at all times  
Phlen - Cullen reco in Synochus - B  
reprob in Synochus f f or induce debil.  
But not consent - in fcy deb - lancet  
& not let it dis induce deb. even - reth us  
Stimulants - & the debility c b as easily  
rem as the fr dis. & th<sup>B</sup> as long as the  
Pulse indicates it - It is the Deal plate & system  
& fully exemplif a yellow Rev of 1793 - Every  
dis or implies in it & vs used in all cases -  
Hence cases of of general fcy vs in need  
it is as left so in Local infl.



D. S. Wilson -

Reasons for Dilating P. S. Wounds - If it passes the  
 the muscles a thigh bone, compare mild - Now if the  
 matter be a small outlet, sinuses will form  
 & fistulas - Now if dilate the m. to be disch & it m  
 m be healed for its bottom - Neg the part room to  
 swelled & red it is nature of an incision - Then give  
 m to appl to in compl cases - Wh out or Bow  
 is fractured - If out - then either into or ext m the  
 place - This m be done by incision & tying the artery.  
 In fractured bone is left recd - In all the wounds  
 it is recd & ought to, in this - So long as ext  
 matter rem At wound & new heal - Some recd  
 deferring the extac until <sup>"1st"</sup> suppur & then it m be  
 "discharged" - 2<sup>d</sup> by making incision or incision incision -  
 In answer, the patient m die bef suppur comes on  
 & the foreign body m m also disch by suppur -  
 as granulat shoot round - In answer - 2<sup>d</sup> it m be  
 rem At sign does a hint to ext - the matter is  
 not so great as the extraneous matter m produce.  
 Hunter adv. the 1<sup>st</sup>

Of the Manner of Dilating P. S. Wounds -



When not easy we dil the mind so thro its  
 whole ext. & we cut w director & bistoury -  
 Bullet in to ext free & scoop a forceps - When bullet  
 lodges - opposite side & then we cut down on it & extr  
 it - tho' counts to Hunter - When ball firmly fixed & also  
 splint it in place in taking them away - Specula  
 himself as it is, & ext all w c & leave the rest  
 for suppuration to disch - I'vet recou the Trophine  
 Bait with - or the Scoop & Bullet forceps of Chesler -  
 Scoops for the best - & are like Percy's forceps -

When we irritate or carried about for any time, swell  
 ling nearly closes the orifice & fear & irritation  
 induced - Always we do I thought & now turned my  
 around the orifice - Sometimes when the b m its exit the  
 general diffused redness exists - The orif must heal  
 w<sup>th</sup> intention - In such cases where infl exists  
 improper to extr subst - we red infl & then ext  
 If inflam is only local, poultices be only recd -  
 When few infl or few - Or th? be used - But no  
 disting between infl for a G.S. mind & other kinds -  
 Also when we be to be lost a time & wound, sometimes  
 pulse rises very high, & we be cautious & w dete



66.  
bl. - There is a great view a few visit which  
us for G. S. Wounds. Treatment During  
Suppuration. Will be mod accord to circ.  
When in soft matter or bone is very prof.  
But if soft matter, bone, &c. w. be consid.

1<sup>st</sup> Obj is to remove the <sup>causes</sup> ~~causes~~ of supp & sources  
of distress. Remove the Mud. & extra foreign  
matter if possible, in a small incision & re-  
move easily to extract. In some cases exfol  
goes on for many years & in trouble without the  
H.P. ext. the matter on bone & keep the wound  
open - nourish food wine & cord. Bath  
& retire a country. When a large back is  
hurtful. & Cases Self & acid muf. & Salp  
of Zinc in small doses. Death not results  
fr. great & long continu irritation & cont  
during life.

Of Partic Gun Shot Wounds.

1<sup>st</sup> of the Head. Various - concuss Br. &  
contusion & scalp. - But skull is fract, tho' it  
freys on to pec shape. Scalp is frequent. Wh  
tho' be passes w. consid bone it is penetr the



brain, b ut slow only penetr the scalp - 6<sup>th</sup>

Care Solis at cornua - went round the skull  
& under the scalp - Dist by a red line - In these  
cases the symptoms are no violent - unless caused  
shock - in ball excit infl - In Contusions -

Scalp bl n b eff under the scalp - Distress  
arises from the subseq infl & the muscle is  
tied down giv rise to great pain swelling & face <sup>stethic</sup>

Treatment - We extract the ball if possible at 1<sup>st</sup>

When concussion - Brain - n b kept quiet -

& give most stimulants until reaction - &

then red infl - Operat not necess - In Wounds &

Contus a Temp Muscle - we lay open the aponeu-

rosis - Can at Bladenburgh - A 23<sup>rd</sup> day convulsion

relieved by opening the fascia -

Fracture - Cranium is dif fr th n by a

bludgeon, as n so n splinters in the latter -

When velocity is great only foramen - & the depress

n skull not so great - Supercil arch n liable

to b fractured in E. S. Wounds - Both Folles fractured

the inner n splinter - In Fr a Skull if depra

the Temp n b appl - Sh<sup>d</sup> cut d a scale



68  
To ascertain the injuries - Kept in to apply  
a frontal sinuous to ext the ball - But dif-  
fic owing to irregularity - to avoid this we  
perf the ext table w a large tref & the inner  
one w a smaller one as we use it perpendi.  
Sometimes diffc to ext the ball - Care ball  
a frontal sinuous - flattened &c. - extruded & healed  
except a small sinus.

~~Latent Heat~~ Dr Hare. Monday Nov. 29. 1819

Latent Heat - Divisible into two kinds - That wh  
becomes sensible on a change of situation in the  
particles & that which is so sensible - Nitro pos-  
sesses a great quantity of latent heat, no matter  
whether much cooled or much heated.

Experiment - Radiation of heat - by Snow-Ball -  
being placed in the focus of one mirror & the  
Calorimeter in that of another -

Experiment - Radiation of different surfaces -

~~Porous~~ Metallic bodies combine with heat less read-  
ily than Porous as Charcoal owing to the caloric  
in the latter being better able to penetrate its sub-  
stance, & is given out in the same proportion.



Where bodies become more dense heat is given out  
& vice versa - but this rule has to be universally  
established as to take place in all cases - D. Haer thinks  
that electricity when it produces corpuscular separa-  
tion is associated with heat - & when it causes rep-  
ulsion between masses is not combined with caloric.  
Chemical heat is dependant upon electrical excite-  
ment or we can not explain the phenomena of nature or  
Chemical action - Different subst<sup>s</sup> h<sup>ave</sup> dif<sup>ferent</sup> points of  
temp<sup>erature</sup> at wh<sup>ich</sup> they enter into combination - Thus  
alcohol has to freeze - & water 39° bel zero or 32° bel  
the freezing point of water - & in these cases they absorb  
or give out differ quantities of Caloric - Expe<sup>riments</sup> - Mur-  
phy's & Snow - condensed water on the outside of tube -  
2 Clases of Bodies give out cold when combined with  
ice - Neutral Salts & Acids - owing to their affini-  
ty for water. The most deliquescent salts & the more  
unstable - Pure potash & concentr<sup>ated</sup> sulph<sup>uric</sup> acid  
will not produce these effects -

Review of Experiments - difficult to connect <sup>the</sup> theory  
with <sup>the</sup> experiment of a principle - as liable to vary -  
Extract ~ 1<sup>st</sup> Lect<sup>ure</sup> - Phen<sup>omena</sup> of it in & effect to Reaction



70 of 2 kinds - Attractive & Repulsive. Their positions  
are of importance - The next portion is that both can  
reside in same matter at the same time - Then  
results from experimental investigations - D. Black  
experiment of Wat at 32 to Wat at 170 - & the effect  
& also the conversion of water into steam led to  
this important principle - & w. subseq appl to  
appl it phen in all substances - This led to  
hemi caloric, to disting it from its effects - The  
next subject was the means of making Caloric sen-  
sible - Solar Beams, electricity, galvanism, coll's  
attrition, percussion, friction, condensation, are  
the means by which it is accomplished - Then  
nature also shows - Under the V. of the Effects  
of Caloric, was expansion - of fluids the Thermo-  
meter was an example - Exceptions to this Law - w. wa-  
ter after 39° expands & at the freezing point gains  
 $\frac{1}{9}$ ° in Bulk - Another exception is clay; in Wedg-  
wood Pyrometer. The case of water is very dif-  
ficult - even to be exp by the polarity of the  
particles - Explaining ice by ice &c -  
With Clay but little difficulty in explaining it.



as we suppose the particles to be in a prof. state  
of juxtaposition - Wedg-wood's pyron & use of a. l. l. - Exp  
lined the construction & pyron - Big paint of Merc. Sbrt  
of 500° Heat of Furnace - 25000 - of Fahrenheit - 1000<sup>th</sup> part  
of a Smith's furnace w<sup>d</sup>. Kill us -

B. M. D. James - Monday Nov 29 1819 - ©

Care of Extirpation & Uterus by Mr. Newham -  
Complete Inversion & Uterus <sup>was</sup> caused by <sup>neglect in the</sup> separation & Placenta -

1<sup>st</sup> supposed to be a polypus & applied a ligature & discol  
and the punctate & again appl the ligature - Delivered  
in Jan<sup>y</sup> 1817 - & in <sup>13</sup> April applied the ligature - 14<sup>th</sup>  
tightened & pain irregular - similar to uterine contractions  
Openment used & opium - 16 restles & a typhoid  
lig - 17 Puff right - pain & tenderness ceased - 18<sup>th</sup> sent  
ward symptoms vanished - & tightened the ligature - n b  
symptoms 26 very irritable & bad symptoms -  
6 May no pain & tumor bee detached - size & hot -

15<sup>th</sup> n discharge & became conalescent - Cont Mus. Fibres

Scirrhous & Cancer Uteri - Increased in Bulk  
firm & hard, & when cut open cells - Interm. mufi Uter  
extend: ~ vagin, bladder, Rectum - Ipermeity & the st  
be incld under the Gen. l of Carcinoma & Ulcer



72 few attacks the cervix uteri. but the fundus -  
when violence is done, suffers rapidly - Discharge of  
mucous - Baffle all att to cure & in effect cure  
Eccuta & Solanum best. injections if these are  
unsuccessful - Arsenic Sat. Sol. 3ss & 6ij Aquae -  
Uter - Alumina - Bark, laxatives, Chamberlains  
Coul: Kerri & rec by Carnick in Cancer -  
Best in Scirrhus Enlargement ~ of Uteri - Dr  
Lammy - Dr. Olander - he excised the whole Uterus -  
As it commences ~ or twice per fatal but it is  
destroyed - When it may be cured by excision  
When the disease has extended ~ Vagina fatal -  
Has been performed 7 times successfully - Su-  
perstices performed 8 times - Dr. Olander - drew it  
down by threads - & cut a Bistoury horizontally  
thru the fundus Uteri above the cancer - Then  
Fornices & Astring injections - vide Eclect. Rep. 7<sup>th</sup> br  
This dis is not codef. uterus Ovaria not  
bec dis - per fatal -

Dropsy of Uterus - Treatment went no cure -  
is very frequent - Cure 50 lbs of Water - Bouquet  
70 lbs aque - Most usually Hydatids - & in frequent.



Case D. James. Supposed 5<sup>th</sup> mo pregnancy - & great 73  
pain similar to abortion - Ruptured the Membrane  
& numerous vesicles - no ovum or foetus - hen ceased  
& got well - Mr. Home relates a case of this kind  
& supposes it a gen affect & amnion - The foetus dis-  
appears - 2<sup>nd</sup> vol London Med. & Phys. Jour - Quant 3 lbs &  
3 oz <sup>of Hydatids</sup> - were discharged - Also Morgagni - &c - Querc - Pres-  
umes they proceed & death & ovum - Hartman 1<sup>st</sup>  
& Tyson proved they were a species of worm -  
& Hunter & Pallas proved their vitality - found in sheep -  
Also found in other parts & body - vesicles containing  
worms resembling Venia - Lescart & Ruych L in  
w th a brain - Dr. Baillie counted the Hydat of Spag  
similar to those & liver - & one worm in living amnion  
Seldom fatal when outlet & b established & w th  
Mercury in b suppl - Case 145<sup>3</sup> hydat & lungs by Calo-  
mel - w L orig & liver & proceed to labor - Trachea -  
Change of air, good diet, exercise, & rest. The act & vas-  
cular system - Burns recover the Boylie & Astr  
inject. Rqd & liver dif fr th - Uterus - resented Old Box



D. Core Tuesday Nov. 30<sup>th</sup> 1849.

- In Phlegmasia - It is the chief dependence  
 It does the off of disorganization & is the best  
 remedy - 1<sup>st</sup> We relieve local pain, which is apt  
 to be - 2<sup>nd</sup> The Gen. fib. system are done  
 3<sup>rd</sup> The disordered function restored  
 4<sup>th</sup> Gangrene & suppuration prevented.  
 5<sup>th</sup> Prevent effusion -  
 6<sup>th</sup> Prepare for the remedies, & hasten  
 their operation - both  
 7<sup>th</sup> Restore the organization by removing con-  
 gestion

Sometimes we need it in general  
 fever - Also Local vs. Gen.

Vide Dorsey.

In Phrenitis - Not necessary to open  
 the Jugula - bleed. Gen. system as  
 well be evacuated from the men.



G. J. Gibbon

73

Wounds of the Face - Bones & muscles are  
wounded - Chief danger in the bones - It is rare in  
simple fracture: or forced in on the Ethmoid bones.  
Great danger of cancer & prof suppuration - It is treated  
in some cases as those from other causes - In others  
no extra splinters & keep open the wound. The eye in  
many cases is much injured - Case - the nose & eye  
& came out at the temple - Cheek bone alone & little  
injury except when other parts are injured - Case 5<sup>th</sup> -  
Wound thro. the bone & cheek & came out at the temple  
- Offended a Upper Jaw - dangerous, <sup>may</sup> destroy the  
Anterior Maxillae & injure the eyes. Case - Ball lodged  
in cavity of Anterior Maxilla: Living meat put in &  
much matter formed - When Wounding in bleeding  
from bones -

~ Lower Jaw - Attended or in serious consequence - Near  
nerves - or Parotid duct - or if fractured - attended w  
all the symptoms of compound fracture - It is a gift  
to be profuse as Lage out & scarcely escape being  
injured - Must also dread tedious supp, exfol  
teeth & whole jaw may be destroyed - Case Officer



76 Fracture - Lower Jaw - at North point - Copious  
vs - hem seen but no swelling, Max gland in-  
jured - treated as comp fract & recovered - Case  
fracture, splinted, hemorrhage & ecchymosis - treated  
as fracture, vs bowels open, low diet, & diffu-  
& collect of matter & pieces of bone - fistulous  
opening - finally recovered

Wounds - Neck - Differs according to velocity - Verte-  
brae can be fractured - Dorsal & Lumbar in  
soften splinted - Wh Cerv-verte: inj Sp: Marrow  
is usually injured. Symptoms of concussion.  
Much danger of hemorrh. Tho' in 10 feet at 1: as  
in other wounds - But wh sloughs not get dan-  
ger of secondary hem - & Mr H, guarded against  
secondary hemorrhage - & can also be done - Case  
wh little danger apprehended - & hem came on  
three times - I had to cut down & tie the ligament  
ab - In such cases it is best to cut down  
& tie the artery on the trunk, to prevent secondary  
hem fract best - in the great case so guarded against  
splinters - In most cases the pieces splinted  
& bled passed out.



Wounds - Chest - It also mortal - sometimes a little  
injury - C, but tells what part - If ball enters  
the chest in diff situation - will diff be wounded -  
vide Charles Bell - A rib sometimes prevents the  
entrance a ball & wound only superficial, unless  
the rib is much contused - Sometimes lungs not wound-  
ed - at the both ball & speculum wound the <sup>lung</sup> rib -  
Less dangerous than sword or bayonet - May fol-  
low the same effects as other wounds - Empyema  
Extravasation, Empyema - treated as from other cau-  
ses - Splinters - & fract sternum by trap-  
ping - When sapro the pl & lungs, extr into the  
lungs & chest - It may be lodged in lungs, or fract rib  
or cloth & great infl produced, with great issues  
of matter - hectic fever follows & if no relief  
die - but exist for a long time - Case - Capt! Jordan  
wounded in a duel - Ruptured 7<sup>th</sup> Rib - & lodged below scap-  
ula the lungs, fract rib, & spine & verteb - Pain soon  
ceased - but he was exhausted - & confined on his back -  
port wound soon healed - this produced distressing symp-  
toms - Hectic fever - &c - prior to wound he in debilitated  
health & aft been completely cured - Copious sup -



78.  
penetration ensued. Dilated the external orifice. &  
facilitated exfoliation. Detached rib & vertebrae were  
eaten by Dr. P. & Warren - Dr. J. saw him in 1871.  
& ascertained the cavity - rib & empt & right side  
& chest - rent removed to discharge matter -  
thought the dish owing to extra matter or skin  
over a lung or both or habit or admission of  
air - must ascertain whether it is cancer &  
will enlarge the orifice by rent - if not, will  
wash out by warm water & close the wound.  
Syringed the cavity & cloth was washed out - got  
much better - & died in 1816 - When he died - W.  
left side empty - bone & lead lodged - & diaphragm  
had the open to go to W. & recovered.

G. S. W. & Abd require the same tr.

Vide Hunter, Le Grand, Chevalier H. Bell  
Dr. Horner med: records -

Next Abscess -

Dr. Hare Tuesday.

Respiration - Centigrade thermometer - but a very  
Decimal scale - then showed the expansion of  
elastic fluids, but it was necessary to mention  
the pressure & atmosphere.



79.  
Air as it becomes more rare, requires more heat to  
sustain water in solution - Where there is much air  
there is more cold than where there is a plain - Thus  
mountains are colder than plains - owing to its being  
exposed to a stratum of air of any distance - Another  
cause of difference in weather or temperature is that  
a stratum may be rendered lighter either by a dimin-  
ution of ~~caloric~~ pressure or increase of pressure -  
Use of Mountains is to condense moisture - as the cause  
a mixture of the warm moist air of low countries  
with the cold dry air of the upper regions - Proven at  
this time by the Quantity of rain in the eastern States  
or highlands while so great a drought exists here -  
Mountains supply plains with moisture & plains supply  
mountains with warmth - Snow produces warmth  
owing to mixture of different vapours - & snow  
checks cold - The Density of Atmosphere varies very much  
at 3 1/2 miles 1/2 - & 10 miles - at 35 miles the air is  
rarer than we can find it in an air pump - & 70 miles  
1,000,000 - Solid meteors are formed in the air as  
it would take millions of miles to form one mass  
of meteoric matter, as iron, nickel, manganese



& it is impossible to conceive how these matters  
 can be formed - As water only is found in  
 drops & never descends in hoofs heads as it might  
 if this ~~were~~ <sup>was</sup> the case +. Elasticity <sup>is</sup> depends upon  
 the power by which a body compressed returns  
 to its original size - Air pump is founded on the  
 principle of Elasticity - There is a great difference between  
 the power necessary to abstract air & water - as we  
 never can produce a perfect vacuum with the air  
 pump. Pressure of the Atmosphere <sup>consists in</sup> ~~air~~ chemical attrac-  
 tion - as the removal of it, increases the separation be-  
 tween the particles in body - If additional caloric is  
 added the cohesion is entirely overcome & if ~~an~~  
 increased particles are added the body remains the  
 same - Experiment of Ether. Effect was the same when  
 caloric was added or atmospheric pressure rem-  
 oved - Boiling point, therefore, not only is dependant  
 upon the heat applied, but also upon the pressure  
 of the atmosphere - By increasing pressure may increase  
 heat & in this way the solvent power of water is  
 very much increased, as caloric itself is a solvent  
 & assists the solvent power of the fluid or water.



81  
On this principle Papin's digester is constructed. - Thirty  
degrees of heat increases or requires the pressure of another  
atmosphere - & in this way may account for earth-  
quakes - owing to the vast pressure which the earth af-  
fords to confined air become heated by subterraneous  
fires, & being suddenly removed. If earth was subjected  
to red heat, many substances would become vapor,  
the pressure & atmosphere w<sup>d</sup> be increased, & finally wa-  
ter would cease to boil. - Theory of the Earth - Hutton's  
theory <sup>was supposed not</sup> not correct, as many substances w<sup>h</sup> we have  
could not be the product of heat - But Sir J. Earle  
proved that when subjected to great pressure - lime-  
stone & bitumens may be fused, without being decom-  
posed - Boiling point was shown to depend on compo-  
und ratio of heat & pressure - Modification of the atom-  
ic theory, presumes that bodies combine in measures or vol-  
umes - While the atmosphere prevents evaporation in one way  
it facilitates it in another - when a different substance  
is interposed or the atmosphere presses only indirectly  
the point remains fluid - But when in immediate contact  
with the water, they combine chemically & the water evap-  
orates -



Dr. James. Wednesday Dec<sup>r</sup> 1<sup>st</sup> 1842

Imperfection ~ Uterus - Can when but one fallopian tube and ovarium & bore several children of both sexes. Also can by Cole of double Uterus - Dupuytren<sup>des</sup> relates a case of Double Uterus -

Aqueous Tumors h<sup>t</sup> disc ~ round ligaments.  
Hernia Uteri ~ Abdomen up & Crural Arch. Case ~ Hernia ~ Prog Uterus - Treatment same as other Hernia.  
Inversion ~ Misc Memb: h<sup>t</sup> s. l<sup>t</sup> b<sup>t</sup> invert, but I c<sup>d</sup> hardly bel it - It m<sup>t</sup> b<sup>t</sup> a memb. found ~ Uterus -

Calculi Uteri - rare - Capuron h<sup>t</sup> seen layers of calculeous matter lining the uterus - Prof. Little mand - significant: ~ Uterus -

Retroflexion ~ Uterus - case by Denman, & rare - When the fundus is bent & lies th<sup>t</sup> rect & vag. C<sup>d</sup> only take pl<sup>t</sup> missed post. delivery - Fl<sup>t</sup> draw off urine & treat as Retrover -

Hydrocele Perinei - few def up per dropsy. When large - puncture - vide Denman -

Hernia Vaginalis - m<sup>t</sup> b<sup>t</sup> reduced w<sup>th</sup> labor - or bad Course -



82

Hard Tubercles - from the Uterus - diff: size - seldom  
Ulcerate - Has seen them as large as the child's head & mis-  
taken for pregnancy - Orig: near the fundus & at first only  
connected by cellular Membrs: but soon become involv'd in  
subst: of Uterus itself - & form almost one substance w/  
Uterus - Example of a very large tumor involving the sub-  
stance of Uterus & covered externally with smaller tubercles  
Deposition of Albuminous Matter in Uterus, &c.  
See. Related by Monro. Resembles a bees Wax & Yellow -  
Fleshy Tumors or Moles - ~ Uterus - Diff: sizes - con-  
sistence - See from a Virgin Uterus - resemble pregnancy  
but advances faster than preg - Can do it: before quickening  
& after quick & increase so much as preg - attend w/  
Hemorrhage -

Spongoid Tumor - vide Burns - firm elastic  
tumor, mag, burst & disch: red fluid & purg: Uter -  
Cauliflower Excresc of Dr. Clarke vide Burns -  
Injct: Cortex Quercus & Alum -

Tympanites Uteri - secreted in Uterine vessels -  
troublesome - runs to that in rectum - Dr. Church case  
Bitch, Chalyb, cold bath, astring injct - sort Decree  
& Alum - exercise - Cured by Pregnancy -



Sulphuretted ozote -

Dis - Gallot: Tube - Infl & later not extreme,  
 & Gallot Tube - also violent Perit: Infl - causes  
 adhesions & funtreated extremities - Dropsy & Gallot  
 tube not occurs - owing to both ends being closed.

Ovarium & Gallot Tube - becomes developed - not  
 & full period of gestation - ruptures <sup>generally fatal from</sup> the ovary.

Dropsy & Ovarium - M apt to commence  
 after loss or supp & menies - Disting from Ascites  
 more lateral & early stage - Excision 5 Cases by D. M.  
 Domicile of Danville Kentucky - 3 & 4 with success.  
 Vide 7 vol & Select Report.

D. Gibbon - Thursday Dec: 2<sup>nd</sup> 1819 -

Of Abscess. Also very recent in only part to abs  
 blood - all arise fr all the causes of infl - to some  
 without said cause & called spontaneous, gen under  
 & Cellul - Mem b - app: to surface gen - prevents affe  
 ctions - In some cases bursts internally, in such case  
 the action to the surface is interrupted or get into  
 mally fast - Diff causes pass the prop & surface -  
 The surface is diffusor or want of expt a sur -  
 The proper is Mechan & is owing to motion of a part.



The healthier an abscess the quicker & smaller orifice  
 The contrary takes place in indolent abscess. The gen  
 a local dis. The system but is gen affected & pre-  
 cedes the formation of abscess. Diet may be induced  
 Symptoms of suppuration - Soft, white yellow spot -

1<sup>st</sup> Pufl, then Suppur & Ulcer - in some cases the matter  
 is discharged spontaneously - but in other cases surgical aid is  
 when suppuration is inevitable we hasten it - ~~The~~ salt water  
 afford heat we may - best when combined with  
 moisture - 2 forms - Poultices & fomentations - 1<sup>st</sup> Best  
 made with a Indian meal also Flax seed & oatmeal also  
 prop to add oil - The degree of heat is to be regulated in  
 stage & parts - When too hot, gangrene - also in prof  
 & depth the greater the heat & in most on the sur-  
 face - For remedies are to support strength, rich  
 diet & tonic Medicines -

Quint. Whether abs. sh. be open by cut. When cut by  
 poultices & surf sh. be done - But when deep we re-  
 ort to cut & open - Also we treat our cavities as  
 Throat & Abdomen - When a deep incision is required we  
 be cautious - Some open every abscess, wh. dis. a  
 healthy but it is improper - & sh. only be open



When day of life on a n b bro: & surf -  
 2 modes of open - Incis & Canthic -  
 Deep th incision, pain moment - Canthic dif  
 to heal, large opening, destruction of skin, also wt.  
 deep, can't c n b at all compl - Patient not sty.  
 to knife & then n use th knife - But a few  
 inc's necess. - but n in deep seats parts -  
 Common Lancet - aft coac, a mm post.  
 tice n b offl & heat grad increased - 3 Wett.  
 Seton - n v unuf. - but secret action is long  
 n b inid. - Paped & bottom - wh n inid n  
 b withdram - When open remains Sinus or  
 Fistula rem - In th cases n aband for tret.  
 ment - Partic: Abscess

1st Centrum Maxillare - Every age & sex  
 adults n freq - Sometimes <sup>generally</sup> proceeds from <sup>9e10</sup> fang  
 of a tooth - <sup>accumulating the virus & being. membrane</sup> All fr <sup>9e10</sup> gen inflam - & proceeds to every  
 cell - Gen attrib to toothache - Dis bec aff as it  
 ido - Pain hdr & head, eyes, fever, When l' stage  
 over, swelling & cheek & alveolar process - & matter  
 discharged n fr th cutr but unrounding, murther.  
 When n n cutr - gen abscess is prod & m co



few evacuated at the point - Palatibow - sent  
thro the mouth - Abs inf or bitas plate into the  
eye - Matter very fetid - & great stench - & is a cu-  
tain characteristic & disease - Attrib to contact  
with the air - Matter red disch into the nose  
At sutures slight oozing from the former -  
Old surgeons not acquainted with them - Old methods  
were to enter molars & perf w a stilet - but few  
could in effect it is in use now -  
One & Portena Molars - 3<sup>d</sup> Best - corresponds -  
Middle & Ant. Stilet in b into to enlarge the orif.  
When the matter is disch the matter is in case & in  
b, use astringent inject R Myrt, Gull / Lime  
or Decott of Oak Bark - French advise remov  
anterior part & check bel chlk bone & at 3<sup>d</sup> Molaris -  
Op. Raise the lip & apply small Trephine - Wh let  
out, astring & washed w Zinc - Shd. in b followed esp  
in extr cases, wh ind rect or thick alveoli -  
Wh in burst ext - in end by Treph - 3<sup>d</sup> Method  
Scordine - Enlarging natural opening into a  
nose - Putra is pract, but very difficult - Syringe  
c in b introduced - It is used in London -



In fistula & Anterior part. - Infrequent - May  
 enlarge the fist opening & vice versa - Use various  
 methods of incision - Ext 3<sup>d</sup> Mol: Tooth is  
 the best method & after injections - can & cures  
 Abscess & Frontal Sinus - It seen 2 cases - Trephining  
 Matter dis is due above the Sphenoid & all above  
 Maxillary Abscess - Causes - No f for  
 infection - D. Underwood - says owing to cold - from  
 by Sphenoid, swelling, redness, & severe pain, when  
 cellular membrane in face - No glands seen swelling  
 or clotted, tumor & hard & milky soft - Saff  
 is an extract - that remains a long time  
 Sinuses ext in every direct - Retention - early  
 for or top. Trephining - after face is incised  
 & topical by leeches - are many - When treated  
 cover the breast w cloth - not head - Purgatives  
 & the in face prev infl - When it has progressed  
 diff to prevent suppuration - Loxan's plaster has  
 in some entirely checked suppuration -  
 When Abscess formed, change treatment - & en-  
 courage suppuration - Knife is improper - Hunter  
 1<sup>st</sup> to prevent this, glandular structure not to be



wounded - Spontaneous opening of abscess - apply a  
poultice - When immersed under the skin in case  
of cancer - When tumors, bores, & stricture in  
jection - When many sinuses, uniform pressure  
in one case consolidates the sinuses - in many  
cases press or cure the disease - It is in lay open  
the abscess with knife - & in some cases seton  
necessary and by passing gun shot probe around  
with silk -

De Hare Thursday Dec<sup>r</sup> 2<sup>nd</sup> Recapitulation

Why does not high pressure steam scale as much as  
steam at diminished pressure? Owing to the additional  
oil capacity for heat - & the sensible heat is dimi-  
nished. Heat was specific heat - Different bodies  
assume different quantities of caloric - Water stones  
flat copper vessels heated with boiling water - at 1000  
copper 120 lbs in 60 - sec - for water in bulk takes 2<sup>nd</sup>  
the quantity of heat more than mercury -  
Next communication of heat. Slow & Quick  
communication - How, conducting & circulation  
with solids & fluids - Method of conducting heat - Heat  
will always be diffused through the whole medium



90. Next Radiation of Heat - The air is not as  
is generally supposed a bad conductor. but only  
comparatively speaking - owing to its rarity  
& it is able to carry much heat by conduction.  
In smoking stoves sh. attend to the radiation - it is  
the heat most to be considered -

Quene. W. not a polished stone cook but  
a Ball one heat the room best.)

Caloric exists in three states - 1. Subliming matter  
possessing it. - 2. -

Of Light - The difference betw eyes open & shut  
is light - Philosophers differ - some suppose it per-  
vades the world & set in motion by diff bodies  
Newton theory best - that it is ponderable & gain  
off by luminous bodies - <sup>200-500</sup> miles in a  
minute - No reason for this, why matter re-  
is b as small as fly as swift is necessity demands  
If luminous is indivisible & motion requires. re-  
ate division - The reflection of light - angle of  
incidence is also equal to angle of reflection -  
Particles of light are attracted by ponderable matter  
& the line is bent to form an angle -



The angle of refraction bears with the perpendicular.  
 Diff. bodies refract differently - glass 2 & 3. Diamond 2 & 5.  
 Dispersion of light - disperses differently in passing thro' a  
 hole in a shutter - Red, orange, yellow, green, blue, in-  
 digo, & violet - On this was founded Newton's theory of  
 colour - The spectrum was supposed to be made of  
 but few rays 2 or 3 - This is Mechanism -  
 Query? whether heat accompanies light or whether  
 light displaces heat - But Herschel discovered rays  
 which heated but did not illum. - greatest light between  
 yellow & green, heat red, & decaying violet.  
 Light decomposes very independent of its ~~chemical~~ or  
 heating property - Leaves afford oxygen when placed  
 under water - Acid decomposes & salts blackened at the  
 violet and owing to decaying violet - Phosphorus in  
 flames - red & extinguishes - violet - Herschel suppo-  
 sed the greatest heating power lay in the red ray - But Be-  
 rard supposed it existed in the red ray - Dr. Haer  
 thinks there is high authority for doubting the materi-  
 ality of heat - arguments - Homburg's pyrophorus is prepared  
 by adding 1 part of calcined alum 2 parts pearl ash to  $\frac{1}{4}$  Chincan  
 & igniting them for an hour in a retort.



92. Dr. James Thursday Dec: 2<sup>nd</sup> 1873  
Dropsy of the Ovarium - Can only perform

Paracentesis - We use a large trochar & matter  
is gelatinous - sometimes or a p thro the canal.  
Case gelatinous fluid extended to the abdominal viscera -  
matter contained in cysts few of a differ appearance -  
but in one case the contents of all were the same.

In one case dropsy of both ov existed, & no fluid  
followed the intro & trochar - Disturb for Preg -  
must exam per vaginam - to ascertain if it exists.

Cases where pregnancy has been mistaken - Mrs. Fitz-  
gerald - Scrophulous tumors of the Ovaria - soft  
cheesy subst - Burnt sponge, extract of mercury  
L & used in vain, but in L palliation & attend  
to bowels & bladder -

Spongoid tumour & ovaries - Burns -  
Of Conceptions.

Uterine changes are very minute - Earth  
animate & inanimate matter, latter indistinctive  
Anim. & Veg destructible - Both of diff duration &  
liable to be destroyed by accident & disease & can be  
re-generated - Accompl by passions - not violent  
as frogs -



Animals support spontaneous generation - animated  
 by heat & moisture - as vile - but owing to semi-  
 sep - In the veg sexes separate - Palm tree -  
 B in the comb & coat a new plant - In  
 Pandalous fl female longest & erect, male - Some  
 In the veg & the pair of reprod as polyphi & slips  
 of trees - Lobster - Human species can not be  
 reproduced in whole but only part of a part -  
 Some animals Androgynous as mist & earth  
 worm - mutually impregnate each other - in  
 some the intervention of a third is necessary -  
 Known in most animals sexes distinct - A  
 real Hermaphrodite never exists - When distinct, can  
 produce either one or other sex - sometimes mix-  
 ture of both, as mules - male Linnets & Canary  
 bird prod mixed with a new breed - Black & Wh in  
 h. b only the same - Horses suff coitus took  
 place in all, but new exceptions - In period  
 various much - In cock & hen - quick - slow in  
 dog & frog - The effect is semen & conveyed into  
 the vagina - small quantity will impregnate  
 Hullaerian - Semen does pass into the uterus -



94 Proven by J. Hunter, who saw the semen in  
a bitch enter the uterus per saltum <sup>During coition.</sup> - Bede spots  
of Ellroth in Blumenbach - also in Phil Trans  
action <sup>1817</sup> paper by Sir E. Dowe - "It is disputed whether  
the semen enters the uterus & comes in contact.  
As J. Hunter open the uterus a bitch killed at  
coition he saw clearly the semen passing into  
the uterus per saltum - D. Physick in 1790 - Heard  
the following experiment - J. Hunter supposed that  
the semen came in contact with the ovary - opinion  
of Rygg, Haller, Chevalier - De Graaf. It is the  
universal & prevalent opinion, that the in-f. woman  
& East of Europe - Conception of semen & a  
seed in procreation - Experiment <sup>of Haller</sup> with watch  
glass - Changes in the female - Ovary swells  
burst & ovum enters the uterus - resulting Cor-  
pus luteum - can't reproduce - Sir E. Dowe  
In order to conceive in the female we require  
recept. puberty, <sup>passions</sup> & various degrees previous, & in  
females, menstruation depends on ovaries -  
As uterus previous & perfect - previous Fallop.  
Tubes - Nuytton when destroyed the Fallopian tubes  
shrivelled - Did not deny that the semen enters the uterus



Different theory - 1<sup>st</sup> & Mother 2<sup>nd</sup> Father - 73<sup>rd</sup>  
from both - Start in ancient - Aristotle & Hippocrates  
supposed male & right & few & left - but contrary  
"Baffon sup<sup>d</sup> it exists in not a species of  
matter w<sup>ch</sup> mould all nature - genus bec-  
"ame spent dif bet anim & veg & the matter  
necessary for both - & every anim sub could  
"as an internal mode entering a mouth & con-  
"veyed to reservoir receive them when developed  
"properly - This seminal fluid is the perfect prin-  
"ciple of the body - & it is w<sup>ch</sup> collected & muls -  
"and the seminal fluid of both sexes is organic  
"When confined <sup>in</sup> too great quantity produce tumor  
"as cancer &c. (very depending to human nature) -  
"The number, motion, & coarces of the organic  
particles causes the difference of the species -  
"When one <sup>fluid</sup> or the female predominates female  
"children are born - "B perfect children are born  
from imperfect parents - & lower orders of animals  
contradict it, as tadpoles, caterpillars, &c -  
Theorists & Chemists - 1<sup>st</sup> That males & females are  
united by attraction & tertium quid 2<sup>nd</sup> That fer-



mentation took place in the uterus in the  
96  
semen - Paracelsus 1<sup>st</sup> L C<sup>o</sup> period - Retort.  
Next - Stiles the male semen prod the virus  
Leeuwenhoek experimented by microscope 1<sup>st</sup> he found  
small animalcules in semen - Band. He suppo-  
sed only one entered the uterus - Next De-  
Bourcuff sup. it w. cont. in membranes -  
Question - 1. Resemb parents - 2. Resemb  
both 3<sup>rd</sup> the prod of Mules. These animal-  
cules can be discov. in the parts. Spallanzani  
says seminal vesicles & not testis in general.  
Next theory - That the egg is prod. & hatched  
alone - Haller - Spallanz J. Bunter - says ovum  
resides in female & only waits the sperm & male  
to do the semen, which does not enter into com-  
bination - It is the diff. the individuality  
to both parents - see & attrib. to virginity  
b c in the pl: & home - Best theory is the the  
foetus is formed from both parents - accounts  
for similarity to both parents - No probable  
opinion is that of aqua-pendente the all is for-  
med (from the) (digitis in unum) or first  
of the destiny



D. Gibson Friday Dec. 3<sup>d</sup> 1849 -

97

Abscess & Liver - Abdomen for per inflammation - Heavy  
remembrance in suppuration - Symptoms - Obtain Lead  
pain, pointed, when a convex pit for distinct, when  
a concave is easily perceived; when convex & perceiv  
fluctuation - Depends upon situation whether danger -  
when a cannot not so dangerous, matter is disch  
& put gets well - When a concave dangerous - adhe  
to matter dis & inter - <sup>Bile</sup> gate duct - Sometimes re  
is displaced & chest - into the abdomen, punctured  
arteries - When a Chest suff also sent & comes -  
When into the intestines re matter is discharged -  
Wise provision to defend the system - Causes various  
one peculiar cause is from blows on the Head -  
Bertrandi - remarks that abscess succeeds W & H.  
Case Fracture - Cranium - death & 70 years & liver -  
Occasional delirium Later urine, & on death abscess & liver  
another case - Wud & H. penetrating & dura mater - first died  
in 2 months & soon returned with swollen head - face  
diffie breathing & died & no morbid app & head but  
large abscess & liver - H. never - couple of pain in  
this part except night -



It is difficult to tell when matter collects  
in the liver as sometimes but little fluctuation.

Sometimes nec to cut into right side -

Mistaken for other dis - Full <sup>bladder</sup> ~~bladder~~ distended.

Circumscribed & under the liver - Abscess con-  
tains different kinds of matter, chery, &c. &c.  
Whole substance sometimes is dissolved.

Treatment - Difficult Good diet, acids, particu-  
larly nitric to prev suppuration - They fail  
& matter is formed - Sometimes but simple puncture  
use is necessary - Sometimes large incision - It?  
cut in depend on thinnest part.

Operat - Incis depend on the peritoneum & the cut  
through the peritoneum - Large - need not mind

The direction & incision <sup>counties in good</sup> - After matter disch.  
(when matter does not become purulent, or it may be open)  
patients become much better, increased appetite.

<sup>the it & not in a trochan</sup>  
Matter freq disch for some days - Injections  
of port Wine, warm water &c.

Collections of Matter betw Abd. Muscles -  
Mostly between Ant. & Transver. & Peri-  
toneum - In Puerperal women, not seldom  
sometimes from ing. & disch. in f. betw the  
periton & muscles -



Treatment - Must puncture early - to prevent effusion of matter - Avoid Epigastric artery - Use & cut on the director - Trochar in good unless very prominent - Tonics & good diet -

Water & Epifloam - not frequent -

Abscess in the Abdomen muscles - Cure by Crochet.

Abscess & Kidney - is frequent - painful & dangerous - owing to calculi producing suppuration - Deep seated pain & res & kidney & prominent - Urine persistent, but prominent symptom - some -

times perineal urine is disch & fine - but & dis -

When parts <sup>between the spine & testes - & Kidney</sup> matter is diffused - Treatment -

Direct advice opening & back - Proper place between

12<sup>th</sup> rib & ileum - cut thro Quad. Lumb. muscle -

SP. not cut down unless very poor - one take

away calculi - Sometimes buried in the Kidney

only rib kept open until calculi disch - Tonic

& gen treatment - Case - Subject to calculi - Tumor

on right side & spine - Opened & v weak, stone extr.

tent introduced, & calculi came away, urine passed

out & opening - & matter & urine - died in 10 mo.

Abscess & Ovaria very rare - sometimes from



160  
Dropsy - very to ascertain it as confounded  
with Lumbar Abscess. Symptoms - Swelling of  
the abdomen - Walls, hard, matter sanguous.  
Some advise Trochar - others Best to penetrate  
grad & knife - <sup>operated 2<sup>nd</sup></sup> can avoid the epig art. When  
matter disch. inject - Gen. Pract - Some.  
Abscess - Bladder - rare - only in certain con-  
ditions - Cancer - Stones, strictures - gen  
obstruct: of urine - When matter travels thro:  
the cellular memb: very dangerous as urine.  
Treatment - Introduce catheter & dr off urine  
When not possible - in puncture the bladder thro:  
the rectum with Pouteau's curved Trochar.  
Stimul Balsam or of mustard use -  
Abscess - Testicle - in freq caused by infect.  
for Hydrocele - also follows Haem. Hemor.  
When a T. V. Testis is dangerous, <sup>& more painful</sup> than when in the  
Body - Testicle - Sh? always puncture before  
extirpation - according to Pott - Subst - Testicle itself.  
L & mistakes for matter - When body diseased,  
slight discharges of matter apparently are indeed  
the substance - Testicle - I L m? the same will  
take itself - When a T. V. T. in Body treatment



is the same. Warm poultice. When matter col-  
lected open with Trocar, or Hydrocele. 101


Abscess of the Points. dangerous. rapid results.  
Causes - Wounds, foreign bodies, &c. - Matter some-  
times external, then not so severe. They require  
the most speedy & determined treatment - Abscess  
fistula, stiff joint &c. result from improv. treatment.  
Case, caused by flap, neglected by a quack. Very bad  
course - laid open the wound & discharged matter -  
did not heal - Healed by - Stim. Bk & Wine &  
finally got well with stiff joint -  
When inflammation & matter - incisions & tents  
or bougie to let the matter discharge -

Dr. Hare Friday - Dec 2?

Light in passing through a prism is always attracted  
by the nearest surface -

Polarization of light - Property of Iceland crystal, by  
exhibiting two lines when but one was present - The  
When another was placed on it, those rays which passed  
through the lens a first time it passed in the  
second & vice versa - Reflected light does not possess  
the same properties as before - By varying the position  
of reflecting surfaces the rays are differently



reflected. Diagram -  Explained  
in this way - That some rays pass through  
the power of transparent bodies in a perpendicular  
direction owing to their polarity - While with  
other surfaces they will be reflected.

Phosphorescence - Diff: kinds - Ocean borrowed  
light - Expl in 2 ways - 1: During day water light  
becomes entangled with the water & given out by  
friction & 2ndly By spume or decomposition of  
fish - Some attribute the Phosphorescence in fire fly  
to respiration - but not so, it is luminous under  
water, alcohol, oxygen gas or common air -  
Sulphur & Sulphur, Sulphuret of Barites calc.  
used possess this property - Other kind of Phos-  
phor by friction - Electricity, sugar - similar to  
electricity & analogous.

Specific Gravity - Purity of Gold ascertained by  
their levity - Alcohol & other by their levity - Also  
solution of salts ascert by spec gravity & dist  
illers & brewers ascertain the strength of wort  
&c by spec gravity - Spec grav is weight in  
relation to bulk - The weight of 2 bulks being  
known by dividing the bulk the spec gravity is



previous - Reference to water is necessary in  
order to have a common standard. & water is  
also had pure by distil & at a certain temp is  
also of a certain weight. The general principle  
by which spec weight is obtained is by weighing in  
water the substance - & the resistance which the body  
meets in water is equal to ~~its own weight~~ <sup>the bulk of the</sup>  
water displaced & by adding the bulk of water  
displaced the scales will be equifondant -  
First find the bulk displaced & the weight of that  
bulk & divide one by the other & the spec grav is obtained.  
To ascertain the weight of fluids - Weigh them with  
water in a small glass bottle <sup>of known weight</sup> - Can also ascertain  
the spec weight of powders - Strong's spirit 825 per  
with water at 1000 - & in this way spec grav ascertain  
Hydrometers French - The principle is that more  
or less of the stem sinks as the body is denser or  
the spec grav is greater or less - The Alcoholometer  
scale commences above, as it is on a level when in  
pure alcohol & at the bottom <sup>at scale</sup> when in water -  
& in fluids heavier than water, vice versa - <sup>as</sup>  
those in which salts are dissolved -

In performing these experiments - Must attend



104.  
to the temperature - Alcohol varies more than  
any other fluid -

D. James Friday Dec. 3<sup>d</sup> 1849 -

Ruysh found the cav. & uterus of perf. sem. mas-  
culum & also the fallop. tube & as he was constantly  
employed in dissection co. not easily be deceived - In  
the above case the woman was killed injured post co.  
& 2<sup>nd</sup> Cav. he found the semen in the uterus, bene  
concocto - He pressed semen out of the os uteri & also  
found it in the cavity of the uterus & fallopian tubes.

De Graaf & Mr. Haughton suppose the semen pass. ut.

Of the Changes which take place in the uterus  
or 2 Gravid uteri. Dr. Blundell has completely  
overturned Haughton's theory - Corpora lutea not a  
certain sign of impregnation as they have been found  
in the Virgin - Howe, Hunter, & De Graaf: takes  
possession peristaltic motion - James the ut. semen in  
a cavity & uterus - Changes - periton. swell. - over-  
escapes & carried & uterus - This action & in tube pl.  
immediately - De Graaf found no alter. bef 40 hours  
Haller & Balisner never found bef the 17 day - Sir E.  
Howe has found it on the 8<sup>th</sup> day - "On the passage &  
over" - Haughton & De Graaf - misled by theory -



after death examined - was impregnated for 8 days  
before death - Right ovum brown surface & yellowish or  
granular structure - Corpus Luteum to cause it off  
of concept: but in this case I was present - It is a  
solid compact glandular substance, not secretory the  
ovum - In Virgin's it is distinct corp. lutea & more  
out ~~distinct~~ of the ovary - Membrina & Hall Tubes dur-  
ing last embrace the ovary - Gelatinous matter is al-  
ways seen after impregnation & app. to be to pre-  
vent further impregnation - Some suppose that it more  
eases & male are communicated & fostered by  
the semen - Dr. James W. W. Corpus Luteum a gland-  
ular body secreting the ovum - The 1<sup>st</sup> Changes take  
place in blood - Uterus - Membrane forms - Decidu-  
a interna & reflexa - Structure & ovum - Some  
Dr. Graaf V. discover that it exists in viviparous -  
& is universally admitted - Union most firm - Vesic-  
ula alba - small oval bladder with duct & narrow string  
with Hunter - runs whole length of string - The use is  
unknown to me since some useful purpose  
Chorion - spongy & vascular - grad decreases as con-  
tinues - Perhaps they are formed in trophoblast.



Dr. Pitman. Monday. Dec. 6<sup>th</sup> 1819.  
 Abscess under the Fascia Lata. We evacuate the  
 matter early. Hip Joint dis. to be prod by it. Sh<sup>d</sup>  
 make but small incision to prevent extensive infl.  
 Case by Charles Bell. Made deep incision & evac. the mat-  
 ter. or the bone wd have become carious. The dis. was  
 not infect. Child fr 6-14 yrs most subject to it.  
 No fluctuation owing to depth & matter. It travels along  
 the limb. Patient in red. Cut down as speedily as  
 possible - & deep - the outer part best. Introd. tents  
 & injections to excite granulations - in some cases  
 we use ipeget, mercury wine & even Ipeget.  
 Cured one case by issues.

Psoas or Lumbar Abscess. It fr in the groin &  
 freq in P. B & Scro. Males & adults in freq. It is  
 pain & commencement, lameness, but increases when  
 much matter collects. But permanent lameness en-  
 sues. Psoas muscles to be cut off to perf. the  
 limb to opening & the dis. arise & freq from spina  
 but no off cause - cold, damp sheets, wet ground.  
 Matter also occup. one situation behind pector.  
 & cellular coat. Matter travels in Pso muscle -  
 & runs down the thigh under the fascia lata.



Sometime - Paronychia - abscess femoral hernia -

The matter is confined in a cyst & secreted in large quantities - inflame & death. Sometimes opens & matter disch & death follows from irritation. At 1" matter is good, but at end foetid & flaky - verteb in b dis or not, but carious & crumble - but, round. Detritus of oral substance is never diseased. Ans Howship.

Some suppose cancer a cause but Dr. Gibs says it is consequence of supp ure. Mr. Abernethy & I consider free incision. I make a small incision under the skin 2 fingers - 1 a cyst the other - the skin - Matter slowly disch & upper part unites. It also unites the opening & 1" intention - When only small quantity in b dis - in in direct opening & heal in 1" intention - but - in not open at all - Crowther blisters & dress with Savin ointment -

Paronychia or Whitlow - abscess ends 2 fingers - Different species - All treat gen - in common - is into 4 spec - 1. Under the cuticle - occup the skin in root & nail, but new nail formed - when under the nail very painful - & ceases as soon as the matter disch - 2 spec. Occup the adip men



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found to end a finger - 3<sup>d</sup> Spec - & the other -  
Alexa. Deane - Must recollect situation & Alexa. mus-  
cles - Infl. extends & fore arm & arm - Matter in  
the hand - Matter quickly extends under the annula-  
ligament - & around quadr. & flex. muscles - Abs-  
s. forearm elbow joint, & cor. fore arm - 4<sup>th</sup> Spec  
set under the perist. & rest bone - Nerve, Span -  
& delir. a convey & two last spec. - be last no pain  
& internal condyle - Same treatment - Vt. loss diet.  
Wm. water, & Decs of Wm. L. & Wm. - When  
Matter, poultries & matter evacuated - Wm. water  
recommended open & very commencement - In the  
3<sup>d</sup> Spec, matter is not easily discov. in the per-  
joint - M<sup>d</sup> in incision & a sheath & ending - 2<sup>d</sup> Spec  
& finger with direct & bistoury - W<sup>d</sup> not divide  
the annula- ligaments unless to save arm - or  
life - Petit. Deane - Deep M<sup>d</sup> to skin - reject of  
Mug. & back back - or lint dipped in them -  
Wm. & 4<sup>th</sup> Spec - the same - Lintines finger  
destroyed - Soft soap, cannot poultice, blisters  
round the finger or not rel. pin at other end of it.  
When bone disorganised no amputation.



Of Ulcers. All parts liable to ulcer - but parts  
 more prone - Extremes more prone - & proportion distance  
 from the heart - D. Young - In specif Ulcers the dist<sup>n</sup>  
 & extent is not affected - distance - Cancer - Ulcer  
 may arise from a variety of causes - consequent to wounds -  
 In some cases no apparent cause - but: for tumors of  
 long standing - specif dis is gen<sup>l</sup> produced, viz Cancer  
 & Scrophulous - Depend upon the seat & morbidity -  
 Always a secondary disease of cancer & system -  
 cancerous rule is to prod - The frequent causes are  
 wounds, blows, &c. - ~~When~~ Secondary causes also orig<sup>n</sup>  
 in the system - healthy hard work - Illust<sup>n</sup> - Drunk  
 old recent wound, ulceration of an old wound cured  
 over the morbidity & exceed the health - The efficacious  
 causes of Ulcer or of a second nat - Ulcer depen<sup>d</sup>  
 up<sup>n</sup> situation - Dangerous when near large vessels -  
 Also - penis - to be prod for destr<sup>n</sup> matter - specif  
 Ulcers in danger unless specif diseases destroyed  
 The danger wh<sup>n</sup> in an unhealthy constitution - Sometimes  
 infl<sup>n</sup> & great - In some constit<sup>n</sup>: continue very long -  
 & many suff<sup>r</sup> long to heal old Ulcers, by produce  
 detem<sup>n</sup> to other parts - Mr. Home - Gout -



110 As a general principle more depends to heal also  
it to heal them - Tent Ulcers, lay bare run out  
to a great ext - & when over the fascia in extensive  
as parts will not heal over them, as in dead bone  
Clashes - In supp all ulcers alike, except from  
specific dis action. But the so dif & c divided  
into distinct classes. & //

3 Classes - 1<sup>st</sup> Class - <sup>10 species</sup> Healthy - 2<sup>nd</sup> Unhealthy 3<sup>rd</sup>  
Specific - 1 one sp - 2<sup>nd</sup> 4 sp - is hunt 2 radi  
3<sup>rd</sup> independent 4 various - 3<sup>rd</sup> C. camp - every ulcer  
arise from morbid poison as ven - Puer - &c.

D. Hare - Thursday -

Hare always communicates repulsion to the bodies  
to which is applied - Elastic bodies owing to heat.  
Discovery of gases not an old one - D. Black in inves  
ting the constancy of bodies found the old gases exist  
besides the atm air - He found a precipitate in  
depriving alkalis & caustics of causticity - This re-  
moved the film & rays of Mether plan - He found this  
an obnox to life & source of m corruption, But  
D. Priestly from red Acid procured a more re-  
pulsive gas - also in b. proc for Nitellie  
oxydes & Nitre. in last quantity & c -



When we collect it in great quantities & not as  
pure oxygen we obtain for electric - Owing to <sup>the</sup> heat  
letting gases escape a constant principle of bodies  
remains undiscovered - Pneumatics brought - Mer-  
cury - When <sup>in</sup> water & Water in it supports  
at nearly 13 times greater height than mercury -  
Lavoisier & Berzelius contrivances for operating with  
large quantities of gas - It was soon discovered that  
atmospheric air is comp<sup>d</sup> of 2 differing gases - one fatal, the  
other sustaining animal life - Substances which re-  
most strongly give the greatest quantity of light  
when that smoke is consumed by giving an addit-  
ional quantity of oxygen gas - Oxide - Coarse -  
Phosph - 98° - Sulph, blowing water, Charc 800°  
Iron combusts in oxygen gas - When ignited iron  
falls in water it creates so much steam, that  
instead of going immediately to bottom, it rolls about  
the surface & Carbonic <sup>acid</sup> was then found to be  
produced by combustion - Theory of Combustion  
of Lavoisier - Present appl - Heat comes from  
the supporter & light from it combustible - Exp -  
Combustion of Charcoal - Bulk is not diminished  
Carbonic acid gas, fixed air or from air by per-



112  
is formed - Diamond yields the same air - when  
exposed to intense heat - Most acids owe their  
properties to oxygen - But it was supposed to be the  
only acidifying principle - but alcohols also are  
produced - But oxides, acids, & alkalies - But  
water is an exception to the rule is pretty general.  
Experiment - Exploding Kousler's pyrophorus in oxygen gas -  
D. Cairnes Monday 31 - Dec. 6.

Of the ovum - Newham - not Hunter describes 3 men  
also described by Waller - J. Hunter thinks decidua  
to be human subject & monkeys - Decidua resemble  
can of egg, lymphatic acc to Baillie - Cannot position  
determine how decidua envelopes the ovum - Decidua  
vera or interna & Decidua reflexa or chorion -  
Objections to Burns - the decidua lines the whole  
portion - J. Hunter & Bell's theory best that the  
Decidua is exudation of matter compared with  
paint & enveloping the ovum - Decidua when  
washed yellow & pulpy - Best way of examining  
the secundina is to wash them first in warm  
& after wards in cold water - Maternal vessels & placenta  
formed a decidua & foetus & chorion - J. Hunter  
supposed the whole placenta was formed & foetus  
but not so they are separable at an early stage.



Placenta of different sizes & not proportionate  
to the size of child - sometimes 2 placenta <sup>113</sup> ~~one~~  
Cotydon - No navel string bef the bag mark -  
length & cord. The gelatinous matter prevents con-  
striction - The neck being enveloped by cord not  
owing to its being convoluted on the cervix & the  
head passing through. Liquor Amnii diff in diff times  
sometimes 200 quarts & 3 falls in one instance -  
Usually 2 parts - yellowish, not gelatinous, must  
be kept & measured - When liquor Amnii coloured  
with blood in suppur the child dead, owing to  
transudation - Salty, albumen, no mucilage  
but white matter is secreted & child - vide Baguelin  
Dewy's Chem - & Early stage 300 - as in prof & child  
& last 8 & 2 in fav & child - Some suppose it  
to be urine or calina - but in some cases accept  
ali & infero withness - Still, transudation -

Secreted & internal surface & Amnii - Some  
suppose it to surround the foetus - but absurdity -  
Mount a Placenta - Use & Amnii is to defend the  
foetus & prevent contact & sides & uterus & protect  
it from external injury - In latter stage form the  
delatation & cervix & os & cord.



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When member from rect to cord m b  
Washed into the vagina & fatal compression -

D. Gibson Tuesday -

Dis. Cancers & ulcers. B. Bell -  
Simple Healthy Ulcer - arises fr wounds wh d a  
heal a l<sup>t</sup> within a wks inf - can co exist pus -  
small, in g<sup>r</sup> - granulations - Also a loc dis & consist only  
secondarily affected - When & tens, fever, &c but per loose  
Often fr m time out - m b suff to no interf neg  
this is later just but sugg apst nec to l<sup>t</sup> aid m-  
time 2<sup>d</sup> to prevent noxious fowers - Treatment -  
Mildest & m simpl appl best - Stim food too  
much action - Att to 2 things - 1<sup>st</sup> def fr ext  
causes 2<sup>d</sup> Prevent coarctation 2<sup>d</sup> Proper pos-  
i point - To fulfil - It is Turner's creat or sharp  
as a fed - No benef fr dry lint - healed 3 days <sup>with out</sup> soon  
operates as stimulant & adheres too strongly - granu-  
l-ment m b spread on dry lint - Over the compa  
& rolls - To fulfil the 2<sup>d</sup> indicat - Bandages or Roller  
to approx sides - Ulcer - a pledget a - each side -  
Not tight at first - but m after - Adhesive stops  
Int anif - B int containing -



115

Of Incurable Ulcer. In diff or constic or local causes. Bad constic. incurable ulcer. No characteristic marks by wh to judge. Can judge - ext aff alone. Some symptoms. Big ragged stom off. bottom undermined - puls unhealthy gran - Fish is thin serum, ichorous, spasmodic affect & pain, free bleed. when fungous - granl one dark red when fungous - Flr & var - 1<sup>st</sup> When gran absorb - 2<sup>d</sup> When unhealthy or fungous granulations.

Treatment - When constic. Constic rem to be compl. As in c. in ulcer take the rest, in try diff remedies - Some rec properly to med it to compl & idea tht tht ulcer is incurable so that no time be lost. Best plan - D lay down a rule for Constic affect - stomach is full & must be emptied & w. be cured until it is attended to - Best plan is rest or purgation. Later best in small doses & freq - Aft vom: R of opium or fewer better tht 1/2 R. Cicuta useful - Local applicat - 1<sup>st</sup> Warmth in sev ways - poultice & fow & steam - Poult of bread & milk best - But acct of Lead or decoct of poppy head w. be added - But col of opium or ext acct w. be used



116 May continue the poultice as it agrees  
a Ulcer - When from bee large discom-  
fort of Chomacilla de - Steam of warm  
water useful - But tendency to mortify.  
Med L & add a dry foam - Pulv Carbon -  
2 grains - & 3° Lapis Calaminea - Carbon but  
bit dirty - But scrub with spirit - But for  
open and close - Pulv Lapis Calam - can  
be used dry or mixed w water - Avoid Baged  
open - to refresh fump Pulv Rhein - 10l dry.  
Nitrat de Corros Sublim - When too in  
fungous Discharges - Blue vit - red perf.  
Wadys. painful -

Languid Ulcer - Large insulated granulation,  
white - But slough or gran absorbed - After  
absorp it is red heal - No for a few or  
Local affection - Feeble constit & poor in sub-  
ject to it - Also in Abus House - etc usually  
arises fr Constit causes - No for v. lower  
extrem - Treatment - Tonics & stimulating off  
in use - Wine Star & bowel & the good diet.  
Bee de - More poultices for clams at 6: & then



117  
stim applic - Decoct of  $\text{Zi}^{\text{a}}$   $\text{Wij}$  as oak bark  
very useful - 1<sup>st</sup> Powder Chalk & Calam - put in  
suff stim - Pulv Rhei extol by Home - find it the  
best application - Sprinkles & the dress of corn ointment  
D. P. L used it sent no decid benefit, but is also - As a  
for appl usef - Opim used w it usef - Pulv Colocub.  
usef, & in h. <sup>offens</sup> ~~ref~~ <sup>placul</sup> - Dry Lent. usef & h. a b. put  
away fruit - Cannot poultice also not mixed with  
yeast - D. P. uses Carb. Tereb & is surprising benefit  
- One part a powder - with 1/2 part Basilicon - Precip  
Press in, a best remedy - & Adhesive Straps -  
Baynton - Series prepare the edges approx - No  
to apply by roller -

Indolent Ulcer - definition - surface uniform  
& cool in color lymph - direct both pure & clean -  
edges hard that bluish & sent out - sent coagula  
lymph comes - Causes, intemper, neglect & filth -  
Ind Ulcers in case of all ulcers - Treatment -  
Stimulating - Steam of warm water - Cloths dip  
in warm vinegar - Nitric, Citric & Vitr L & and  
Nitric & L dil 1 pt. acid, a 10 grains - Vid. Home  
Crusts resemble central form on the surface -



118  
Dr I never finds the lam - as describ'd by Haines.  
Thinks N. Acid no benef to any of them -  
After 1 or 2 app to put her in sensible & in  
then give it quantity of water - dim at least.  
Saltp Acid is so good - Dilut lemon juice  
useful - Pasture juice int by Dr. Parryson -  
useful - When these dip in water or Saltp  
Juice or When Loxia useful - as wash.  
Cayenne pepper recom by Haines - Exh juice  
pod of pepper, used in W Indies - Walnut juice  
useful - Steam ointment Basil & red precip  
or Caps Annamaria - When highly it - It  
best in Alcohol also Camph in 6 mgd.  
Nry Hydraz Nitr best wth of long standing -  
strong at first - Adhes: straps & B and eyes  
in herveicible Leds it in any other ulcer.

Dr Hare Tuesday Dec: 4<sup>th</sup> 1819. 12 o'clock.

Quicksilver scan if foyed iron with Sulfuric very  
easily procured & much the best mode of preparing  
oxygen gas. a long Carbon tube useful to convey it  
saves the necessity of joints - Homburg's Pyroph  
1 part Calcined Alum, 2 parts pencil ash & 3/4 Lampblack.



119

The rationale is the decomposition of pearl ash - forming  
sulphuret of potassium - Effluent Combustion of  
Phosph in oxygen gas - Precipitating lime water by  
carbonic acid - Eudiometry or the measurement  
of gases - When duly heated Phosphorus also  
takes away <sup>all the</sup> oxygen from mixture or when com-  
bined - 2 Modes of analyzing oxygen - by Phosphorus -  
By slow & quick combustion - Phosphorus has an  
affinity for oxygen - Thursday No. lectures -

D. Gibbon Friday Dec. 10<sup>th</sup> 1819.

of Cancer. Under its various aff & mod. vari-  
ants suff. resents a crab - from root & filaments  
proceeding a body - Heister. The appellation is erroneous  
as it never resents crab & L. in roots & filaments -  
Carcinoma symmetrical - True character too obscure  
to admit of correct definition - See History of Cancer  
1 Symp. to 2 Cancer & 3<sup>d</sup> Remedies -  
1 Gen. princip - cancer & its osc. except to glands  
strict - but, first, but not to draw so far canals -  
Whenever seated in glands, runs in rapidly - Cancer  
gen. aff. a gland & a form - tumor, increasing  
slowly, as advances pain increased, not violent,



120 about times dull heavy shooting pains, the  
pains cease until infl act is excited, & it  
also happens - Prev to infl it then is mov-  
able, but re after - Cell saliv. contracts &  
becomes diminished, dark leaden colour, this  
not continue it or f years, but when infl  
comes on, soon runs to suppuration - clus-  
ter of small abs - yellowish & thin matter -  
in great tend to spread - when abscess open  
it only few exulcers, hard & callous it is called  
open - 1.° Spreads downward & laterally, margin  
ragged & elev, fungous growth out of dark br  
& blood col & shining aspect, vessels shoot out  
purple or blue, here not the flr fungous -  
slightest touch ind here - the Ulcer is at 1.°  
painful, but aft. ext a second punct, gran-  
ul pale flabby & indist - 2.° in add it fung.  
conical, margin elev & ragged, then surround the  
a Nature & Cause of Cancer, Prox cause is  
obscure, older writers sup the under it.  
A new Pathol, viscosity & fluids - B. Bell - obstruc-  
t parts. Others annunciate dispersed the? the sub.



Dr. Adams suff. Hydatids wh. in a solid food can  
 cause - conta to common sense - upon dissecting  
 hydatids - sometimes distinct bags or cysts in fluid, & in  
 hydatids. has confounded them - Cause of Cancer is  
 obscure - better to say it arises fr some un-  
 known cause - Still disputed whether constitutional or local  
 Mr. Hume properly has proven the latter - Cancer not  
 affected but sympathetically or after considerable time  
 Disease is full upon dist parts & same time  
 but propag its infl to surrounding parts & in time  
 the bee invol & pass on - Consent of parts, thus it  
 need a nervous syst - & when one breast is injured  
 the other is bee sympt off - also uterus & breast  
 Some say arise in 2 pl & same time - But see  
 I am plaus for its origin & if 2 parts become off  
 it is prov th it infl by a similar const  
 affect - Cancer arises from specif dis action  
 & in parts in bee off & same time - My opinion  
 is tht it is a local disease - if dis it were dis  
 & wh fluids, all fluid parts sh<sup>d</sup> dis & ext c  
 in case it - Lymph is entirely new th dis &  
 is the strongest evid of its local - That is exten



122  
I fear that I can't get at it. Some say it  
is hereditary - but if local, hereditary transmissi-  
on can take place. But what I think does occur  
so many in same family - Mr. Home ex-  
plains very satisf - vide Home - Child recent  
parents I don't know cause I suffer same  
dis - in some families he says, gonorrhoea in  
other syph. some stricture, but can't be called  
hered, as it is local - in this way dis not  
hereditary - breasts of few not so similar  
tho the same dis not induced - vide Home & Car-  
son, but - also Pearson

Exciting Causes - M. fery - Ext violence &  
irritation - deter of bl. in act as exciting  
cause. Diagnostic - Conf w scabful - Henry  
hem & Syphilis - Scrof node rapidly  
left pain, scrof deities, when ulcer, with  
rounded & regular, gran large - In cancer  
ragged, irritating matter, fung, large & bleeding.  
Angiosar Hematodes - is soft & elastic, & fluctuant -  
all liver, lung, Kidn, & sple, fung few find in  
young people, when ulcerates very peculiar -



123  
Only 6 Conf W Syphilis & Ulcer state -  
Showing new diseases - of The Peculiarity of  
Structure in Cancer - Scirrhous tum - is firm  
solid & indurated, when cut 2 parts, 1 solid  
& fibr greater parts, 2 cellular, centre is solid  
& fibr hard rays running a circumference -  
also cross bands rec art vites - This is the 1<sup>st</sup>  
stage, after fibrous text is soft, fluid, when it is  
further it is cont in cysts, dark, br, & ch -  
black bluish & not green - not filled up  
by fungus - Ulcer comm a center - skin ult  
rest, & cauliflower fungus projects.

Dr Hare Friday Dec. 10<sup>th</sup> 1819.

Eudiometry. Began with Dr. Priestly & with the  
discovery made by him & Dr. Berzelius - Dr. Berzelius used  
lime water to any air containing carb acid - Dr.  
Priestly discovered that white acid was formed on  
copp & was not white when combined with  
oxygen produced Nitrous acid - But little so varied  
as they combine in differ degs. Mr Dalton  
always still adheres to this plan - It operates with  
more speed. Wids Henry - Rem by Dalton. Jan 21. 1820.



<sup>124</sup>Exp. Tube 31 measures of Atm air - 10 measures  
of vitreous gas - to ~~are~~ 4 measures disapp.  
in atm air - Therefore 14 parts absorbed - If 85 parts  
had disapp. 5 N<sup>o</sup> 6 oxygen - or 10/27 - disappearing.

Exp. Sulphuret of Lime - absorbs oxygen rapidly  
from Atm, forms Sulphate of lime & precip.  
How prep. A tube with a large globular extremity  
& tube divided into diff parts by equal measures  
of mercury - When air introduced into atm air  
there turn it up so the abs<sup>n</sup> takes place, &  
open it under water & the water will enter  
will equal with the air absorbed.  $\frac{1}{5}$ !!

Next book recommends a gum elastic bag, & tube  
containing sulphuret of lime - can be fastened  
by threads without another tube. Dr. Hope's End.  
tube & stopple - to admit the water after absorp.  
Purposes Indian - Lamp - &c - But heat  
renders it inaccurate owing to elasticity  
by heat - Must attend & know & them -  
It<sup>o</sup> being it a same temp<sup>r</sup> when finished  
as when commenced - Phosphorus used -  
by fusing the phosph<sup>r</sup> over mercury - Object



125  
dangerous, troublesome & dirty - New Endicott.  
Tube having steel wire introd into one end -  
& tube - & by having a very small orifice at the  
other end - the air only will enter when the  
wire is withdrawn - The wire sh<sup>d</sup> be graduated  
as the bulk of air will only equal the bulk of  
wire - Tubes for exploding oxygen & hydrogen -  
liable to inaccuracy when transferring the gases -  
No above tube preferable - Thought oxygen gas is  
not condensable per se, yet become condensed  
wh mixed w<sup>th</sup> other bodies - Nitrogen gas has less  
affinity than oxygen to other condensable mat<sup>er</sup>  
ter - Thus ignited coal is ext<sup>er</sup> in it - the ni-  
trogen exists in comb w<sup>th</sup> coal - These eff<sup>er</sup> arising  
to its affinity for Caloric - only combines in  
its nascent - Can we make eff<sup>er</sup> to form of  
Nitric - find a West Country & caves where water  
is excluded - Oxygen & Nitro comb in an unkn<sup>own</sup>  
way the Nitro carries with it its caloric &  
thus the heat during the comb of nitric - It also  
enters into <sup>the</sup> composition of fulmin powder -  
Sold like so ours then proper to Nitrogen -



126 Nitry is a consist of fleet & still an  
oxygen how it is suppl to union who  
line upon we sh<sup>d</sup> in cont it - Except  
th found to oxygen universally producing acidity  
As chlorine possess the prop of oxy it is prop  
to treat of them together.

Chlorine suff combustions, but its importan  
is very small as it is stand in an opposite  
character & thus Infl the of oxy into Hyd & Phos.  
These app to be substances which possess exactly  
opposite properties thus oxygen & hydrogen, <sup>in other</sup> No similar  
Class oxygen Chlorine iodine & hydrogen are  
one family -

Chlorine is a suff life, & no less a brack  
it of a second or inf - for its active dect  
prop, produce infl, has a yellowish green  
colour,  $2\frac{1}{2}$  times heav<sup>r</sup> than common air, produces  
a sensation of warmth, when the hand is immer  
sed in it; similar to w<sup>h</sup>en calst a mouth.  
Viewing it as a simple body it w<sup>d</sup> seem to  
be a better supporter of combustion as bodies  
need to be heated to take fire, leaves infl.



124  
vegetables could press to it & combine with  
water, destroy colours & used in bleaching.  
Though the presence of moisture is necessary dis-  
similar in this respect to light, which disposes  
the oxygen & water to combine & colouring  
matter & vegetable. & Chlorine & Hydrogen.  
Obt- by pouring a Blk oxide of Manganese  
sulph acid, <sup>diluted with its weight of water</sup> & common salt. Its action is  
a very great hinder to its use. When it combines with  
lime or the alkalies it loses its bleaching  
power, tho its active power is dim. It is a  
rapidly absorbed by water through increased by  
agitation & pressure. The watery solution dissolves  
gold & all the metals. <sup>Properties of</sup> Aqua regia is owing to  
Chlorine. In all the processes for gas we  
throw away a portion of gas equal in bulk to  
retort, to prevent contact with atm air.  
Yours & an interesting camp in Chem & made  
with this principle but the consideration of it is to  
postponed. The gas is to be collected in close  
bottles so that it is to remain stopped up.



D. Gibson Monday Dec<sup>r</sup> 18<sup>th</sup> 1879.

a Remedies w<sup>h</sup> to be used profoundly & cure of cancer.  
 Many remedies - Inter used I had used to do  
 it is a constitutional dis<sup>e</sup> - I. Cicuta rec<sup>d</sup> by H. H. H.  
 I see no benefit fr it - tho' it is highly extolled by  
 others - When benefit the dis is not to be successful in  
 cancer - Hyosciamus - not used count &  
 Hemol - Richte, unsuccess - Belladonna, by  
 Lamberger - Richte found it to reduce the size  
 a tumor, but eyes became off - H. P. to give a  
 excellent power - a Min. Kneiff - Arsenic, the  
 very, copier, & Barytes - Arsenic is usu-  
 ally used externally - Fibrous used it I. inter-  
 nally, but no advantage - Mercury & have  
 positive & ulcerated stage, prod bleeding &c.  
 Caps. Vitrinol to be used - A little confid is to be  
 placed in it.

Local Rem - Various - Carb acid gas -  
 Pepsin & De Luvant, Formic acid - used it I.  
 to conf a Bladder - over the air - Gastric Juice  
 no benefit - Oment Poult death the fetus.  
 Podo Carb, Creta, Hemol, the water, in decid



129  
good effects. There rem. in b. serviceable ~  
early stage & in b. tract. Some rem. will  
prev in new skin tum. - Vt. Loc & Gen.  
Loc best & by leeches. Also. Issues - vinegar is  
good. W. b. related to prev ulceration. Low  
Diet, Poutane 1. the good eff. res ~ pract.  
When it rem. fail - the only certain cure is  
extirpation. 2 W. Eschar & Knife. Old say  
if f. or Hem. used Esch. in Act. Cant. - only appear  
it dis & were laid aside a reg. surgeons, still used  
by Ruf. - L. Caus. Arsenic, Cornos Sabl. - se.  
Arsenical caustic best, tho' not violent infl.  
M. Home W. Arsenic & Sulph. a a - destroy  
any tum. W. & in throw out fungous M. P. 17  
he used it successfully in several cases. Bad eff.  
& absorption of Arsenic - D. Gibson think these  
tumors were in and a true cancer. only  
increase the action & hurt. Act. Cant. dis.  
and. Diff. opin. respect it use & Knife  
D. Moors. unsuccessful. M. Still diff. results.  
Mr. Nook also is successful in open or 1825.  
D. Moors owing to Phys. & Surg. distin. & the f.



Hunter & Hume in success. D. G. 26<sup>same br.</sup> - only  
 lost 4 & return & discuss - without success - the  
 manner of operating - when in other parts  
 returned on frequently - the open 1<sup>st</sup> to perf.  
 the success & open - Dep & the age, situation.  
 when young, & not good count on pain if I am  
 in gland parts - far - We firmly connect -  
 subsequent parts, painful glandular, & other  
 vice - Sh<sup>d</sup> also operate w<sup>th</sup> prob of remo-  
 ving all the adjacent parts - Wide Home -  
 operation - 1<sup>st</sup> remove every bit part & on  
 every defect say the parts appear diseased - Sh<sup>d</sup>  
 not hesitate to cut into sound parts. Sh<sup>d</sup> also  
 as in skin as possible as the skin is in disea-  
 & incision made, to include an oval space  
 & centre, & not too much, as we fear closure,  
 Sh<sup>d</sup> Dissect it & direct & subj. muscle at fib.  
 3<sup>d</sup> Remove all the vessels w<sup>th</sup> cut. To prevent  
 Hemorrhage, no vessels are left to retract -  
 Of Partic Cancer - & 1<sup>st</sup> Cutaneous - so a  
 every part, on limb & face, back & extrem.  
 Some suff lip, pref & more of this spec-



131  
Gen commences a pimple or wart - cut in shading  
Cutan Can - hard, unyielding & in the pain, the  
siding softer & in pain - scaly & raw surf -  
the ulcer established, thin, fetid, sanguinous disch -  
aged persons are liable - Old women in July  
the B conf in Lulus & old dis - Disting - Lu -  
pus, in pen, in rapid & in rise at the surf -  
not colored & yellow tinge & attracts young persons, is in specific  
dyssem - Cut Cancer is the Knife - diff to save  
skin - turn run by double oval incision & remove  
all the hardness or return - conf - w 1 pl -  
eyelids - hands & torsus - or lining membr  
in lids & rec cut cancer, trouble & dang -  
diff to ext, fine ducts the col lid, pref to dent  
Carnacula Sackey - dent dis - enlarges & purpus  
size - Walnut size extirpated leaf a large size  
Cancer - Lip - Old persons & lower lip - no  
supp for smoking pipe - B in foundat - great  
mobile in eff it to in inj & rend it in sacrof  
when deep a substance, or superf, painful hard to  
Bony, projects - lip, smooth round & pol, col  
purple lined w red or chocolate - but light  
red bonyous -



1<sup>st</sup> strip covered foot - subst ship -  
 open - in to barrel - various recent V  
 secure vessels -

D. Hare -

The discovery & condensation of Chlorine broke down  
 the diff. betw gases & fluids - & now only retained  
 for the purpose of convenience - Another dist &  
 more imp wh it is broken down is that oxy-  
 gen was the sole ~~and~~ supporter of combustion  
 Chlorine is an equal good if a super-suffocate  
 some whilst not requiring to be heated - Ex-  
 empl of gold leaf - Bleaching - Gas condenses  
 at 40° yet a sensation of warmth is prod  
 by it - When perfectly dry do not bleach  
 but only wh comb it with water - & owing -  
 decomp of water - Ex- of Woulfe's App-  
 a great improvement in Chem - marked a new  
 era in Science. Very troublesome, however, & have  
 adopted 1 more more convenient viz. 2 concie  
 entire bell glass & a bell shaped tube, <sup>& received permanently united</sup> having  
 beneath them 3 concave jars. By fixing the  
 receiver & retort it gas passes down & enters



133

glass & forces out the water into the 2<sup>d</sup> glass & is  
on to the 3<sup>d</sup>. By having in the last glass a solu-  
tion of an alkali the chlorine is prevented from  
passing into the air - Berthollet 1<sup>st</sup> appl. it to  
bleaching but owing to bad smell, must com-  
mence a solution of potash or what is cheaper  
lime - it destroys the smell but not the active  
or bleaching properties. Besides chlorine as a  
superior of combust it & it is not - it  
& placed at diff. expt - Sulp or Hydrog at one  
& oxygen & other - Iodine is a salt recently  
discovered - It is found in mass of soda in the  
mother waters of this alkali - from vanilla  
or sea weed or Kelp of commerce - French Kelp  
is extracted on a large scale to obt. the Sub. Carb.  
Soda, aft. all the crystallizable salt is obtained  
the iodine rem. in water & is obtained by adding  
sulphuric acid - recent chlorine - both form  
acids, by uniting with Hydrogen & oxygen  
Iodine is remarkable for its beautiful col. in a  
state of gas - Henry 2<sup>d</sup> also have seen iodine  
to the same result with chlorine - when heated



has a beautiful purplish red colour - when  
 cold condenses into a <sup>hard</sup> dark brittle substance.  
 It is well to use the term of supports of combus-  
 tion, but dep upon the quantity in whom  
 is communicated to the other - by getting oxygen  
 into hydrogen, the latter might be called a  
 supporter of combustion - & vice versa &  
 this is applicable to all similar substances  
 Gold leaf w<sup>d</sup> be burnt a vapour of Sulphur.  
 Iodine h<sup>t</sup> curious property of opening a  
 purple colour with starch & this has rendered  
 starch a test for iodine - Iodic Hydroiodic  
 acid bears the same relation to iodine as  
 Oxymuriatic acid h<sup>t</sup> to Chlorine - produced  
 by comb w<sup>th</sup> hydrogen - Exp - starch & Iodic  
 acid. Exp combust if Thorpt in Chlorine  
 a concrete acid formed (I suppose - Pl & Muriatic)  
 Most interesting & useful combin is w<sup>th</sup> Chlorine,  
 of Potash, forming match light, when mixed  
 w<sup>th</sup> sulphur or sugar or any combustible subst.  
 & combined w<sup>th</sup> sulph acid. Analogous w<sup>th</sup>  
 iodine is a substance found in flower of



135  
altho' it can be obtained per se & is therefore  
not prop. to speak of it when spk of a th  
comb of Iodine - By pouring sulph acid  
on flour upon a leaden retort an acid is obt.  
'analogous to Hydroiodic & Phosphoric acid -  
This acid destroy the skin, corrodes glass,  
& is used as a test in etching up glass -

D. P. ... Sub maxillary gland - ...  
Dr Gibson.

Canceroides - by Albert 2 species - Cylind & oval -  
1. att. around shoulders & under thighs, att. fashionable  
ladies in connection w/ syphilis - pale rose colour,  
umbilic. bumps, white lines, & small projections on  
surface - oval on the breast - 2. freq. in white  
among negroes, attacks the lobe near, for moving breast  
causing - Extirp. one in Neck took up 25 arteries  
very vascular, but never in it in Whites -  
Others says incurable, but Dr Gibb extirp. suc.  
Many appl - Whit - says occult -

Cancer - Eye, formed of fetal, old & young,  
in freq. in old persons - M. commence in 2 parts -  
either in Retina or Cornea - for - Retina.



136. Globe & eye enlarges. sometimes resembles  
for Anomalous. La silvery appearance, adv.  
forward & iris & then vision is entirely destroyed.  
adheses & iris - comes to. The Prog is diff  
in differ subject - but 2 or 3 weeks - the 4 or  
5 months. Wh reaches to cornea, fingers.  
Extirpated twice - Not frequent in this country.  
Care - & dis it & retina or optic nerve - cold  
exciting cause - either red, or brown chocolate  
colour - with red vessels. No application, unuf.  
The crown spec is pref to better, when the white  
silvery metallic subst is formed or seen it<sup>d</sup> be  
ext<sup>d</sup>. Sometimes extends for the back into the  
brain. Sh<sup>d</sup> extirp whenever finger just a corner.  
Sh<sup>d</sup> separate the angles or cartil<sup>d</sup> & eye for each  
ott. Sh<sup>d</sup> then cut the straight muscles, to  
~~draw out the eye~~ - Not draw too far, & disturb  
the optic nerves, best to introv scalpel & divide.  
I divided the optic nerve with sharp scissors in  
both cases - When it I succeed owing to in.  
fl after a brain - To prevent hemorrh file  
the orbit or lint, in 2 or 3 days profuse supp



137  
takes place - granulations fill up the orbit - it has  
returned in my experience -

Cancer ~ Tongue - A freq - in tumours  
called cancer - Some discharges arise ~ stom -  
some so ragged tooth, cure it by filing the tooth  
where small lump arise ~ subst & tongue, inen -  
sible, horny, & impedes deglut, in attend to it,  
give purgatives &c - Wh no benef in exam &  
operate ~ removal - Some recommends in new  
operation, Ligatures - suff it in to appl wine  
injuring the texture, no danger fr hemorrh -  
Case J. Frey - Ragged needle w double lig it to subst  
& tongue & tied on each side, <sup>Sometimes occasional salivation</sup> for success wh  
tumour not too large - also cured by English -  
skid & long gouge - Operat - Double lig -  
When knife used, in return & also hem - wh  
in every instance w to profuse - except a very  
extrem - W<sup>d</sup> have the actual cautery at hand -  
Case Touril - knife & saved by actual cautery -  
W<sup>d</sup> 1<sup>st</sup> was inter rem half open, as tumour to  
scrofulous -

Cancer ~ Breast - Frey in the count - 2 or 3 dig



198 forms. 1<sup>st</sup> is vicinity a nodule, small tum  
2 other cases numerous lumps of the axilla  
most for a single lump. for gland bec enlarged  
& unites to others. - It is in old & y pers.  
freq in w <sup>some</sup> many children, also old men.  
also bef it - connects w breasts. - Most  
form is Att w att old persons. - at 40 or 50.

Exiting cause pressure clothes - Symptoms -  
Hard tumor, & pain w it is moved  
Lump exists a long while bef discov. But  
tum arise a few days w catarrh suppressed.  
w pain in sleep not specif or dangerous.  
Treated by local appl - leeches, Acet & lead  
vinegar & most w not rem it - or a Chinese  
plaster Lopez or Macky's removes the tumors  
very speedily, Low diet & abso infl.

When still contin, lancinating pain to be  
operate & extirp the lump - best at 1<sup>st</sup> as the  
breast is not injured. - When the tumor is  
very small, nicking wnt to be cut it tum  
out itself. - B when larger, extirp by operate.  
When tumor hard, cancerous & connected w



Pectoral muscle - wh. shivelled & contracted  
 adhering to Pect. muscle, ruffle shrunk into  
 the breast. Wound kind - When tumor deep  
 searates glands & axilla affected - Wh. glands &  
 discaised & intercostal spaces unnecessary to  
 open. Wh. Operation, recumbent or seated,  
 later best, secure Drums, one arm held out  
 to stretch pect. muscles, 2 incis. above & bel  
 the lower incision 1", high & arm pit to 2  
 inches below the tumor, upper incis com  
 mence & the other & extend below 2 inches -  
 then dip to low part & tumor, & see the  
 arteries, before cutting them, & tie them -  
 if cut V<sup>o</sup> prof. hem. - cut & large - but no  
 art. esp. in young persons - Sh. alw either  
 secure w/ w/ or innued aft. ligature cut -  
 When the tumor is dissected use it as a handle  
 to draw down the glands - cut off all dis  
 points & glands - When not extensive in cut  
 off the tumor & first cut the glands & look -  
 & cut them off - S.P. rem every part -  
 after the operation - secure the edges by adhesion & straps.



140 H<sup>2</sup> leaves space to direct matter - H<sup>2</sup> be  
careful ~~to~~ not to injure the veins - be caref  
in to leave sponges too long - free, air -

Dr. Hare. Tuesday Decr 14<sup>th</sup> 1819.

Tube of safety. Although Chlorine impairs the  
sensation of heat a hand, the thermometer is  
not much affected by it. Perhaps if a good  
Differential Thermometer - is affected by it.

Atmospheric Air - Supposes that oxygen &  
Nitrogen in this composition have each a separ-  
ate atmosphere of caloric, but that in these  
compounds the binary, ternary, or quatern  
has each its separate atmosphere of caloric.  
Atmosph air is not a subject of interest collectively  
considered, but when chemically or separately  
considered very important -

New barometer - <sup>Graduated</sup> Tube - from elastic bag, with  
2 valves - one opening for the tube into the bag the  
other ~~into~~ for the bag into the air - Thus every time  
the bag is compressed it operates as a pump & draws  
a portion of air for the tube - Exp. filled  
the bulb & tube with sulphuret of lime up to  
naught - then by introducing a given quantity



of atmospheric air the quantity of oxygen. 146  
can be ascertained & also the remaining impurities.  
Object - Sulphuret of Lime is that it does not  
act quickly, but very slowly - owing to the formation  
of sulphate of lime on the surface & preventing  
the further absorption of air - Sulphur & Iron  
filings will also answer.

Hydrogen Gas - Whenever there is flame it is  
formed by Hydrogen - Obt by <sup>adding</sup> 1 part <sup>Sulph Acid</sup> Water to  
4 parts <sup>Water</sup> Sulph acid to Iron <sup>or Lime</sup> - Muriatic acid  
will also produce it in a colder temperature  
Hare's Method - A small tray in a shallow vessel  
of copper - insert over it a bell glass & tube -  
Also made by passing vapour of Water over iron  
filings heated in a fire barrel - Hydrogen has a  
perceptible smell - Its levity is one of its most  
remarkable properties - 100 gr 2 1/2. 12 times lighter  
than atmospheric air - Employed on this account  
to raise balloons - Extinguishes flame - Gay Lussac's  
method or apparatus very useful - Called  
his own infer (Hare's) the best as it is procured  
by the presence of atmosphere - Exp. Manchester



Dr. James - Wednesday Dec. 15 -  
 Masters - 5 Clapes - 1 Redundant -  
 2 Deficient - 3 Misplaced - from a cont  
 4 Complex or Anomalous 5 Hybridous.  
 11 Mules -  
 Causes & 1. Respiration - respiration -  
 1. Some say during a respiration col  
 of air - but would take place while born -  
 2. Owing to change & circulation - Death of  
 But death by no action -  
 3. Sensation of Cold - a body & child - but resp  
 before first expelled & also in Africa resp -  
 4. Sensation of Pain & Pain - a Pap. & H. H. Pelvis.  
 Disposition & Cesarean operation, no pain.  
 Thinks the air appl & face stim - inter  
 costal removal & death - Proof - Inter  
 the De Death necessary - 2. Breathing as soon  
 as face expelled & does not until mem  
 branes & within a face - 3. When Resus  
 mitted & more - 4. Stim & face excite resp  
 Thinks the foetus in Utero sensible - Struggle  
 in feet presentation - Child starts when cold hand  
 is appl & abdomen - <sup>also in turning the child in Utero.</sup> Child is free in a contracted  
 state & escape as it might by struggle rupture  
 the membrane -



143  
Nourishment - foetus - Drawn from the mother -  
no matter how transmitted - Proven by madder  
col bones & foetus - Hemorrhage & Placenta kills  
the mother - & Uterine hem the foetus - Do venous  
fluids alone conveyed to foetus & mother? but  
D. Farmer thinks red blood passes to foetus -  
2<sup>nd</sup> Gen - Opinions - 1<sup>st</sup> Formed circular & 2<sup>nd</sup>  
Mediate - Proven by J. Hunter that the blood is def-  
- Uterine art & cells & Placenta - Conf by Ouboid  
Exp - Grand Uter inject & crural art - & inner  
and small arteries ramified & spongy part  
of Placenta - only interrupted & not anastomosing.  
Pulsations, not synchronous - Thinks the blood is  
def & cells & Placenta & analogous to lungs - 1<sup>st</sup> Res  
ent of Striae 2 all the BL is dist & Placent -  
3<sup>rd</sup> Some animals dense red - 4 When con-  
- cold death - & prevented by thick covering -  
5 Bl. acq. florid colour in Umb. vein - vide H & A. B.  
Hall's suff by amnion - nourished the foetus - & says  
all umbil. canals contract w<sup>h</sup> no use - & if not used  
the Mesenteric lacteals w<sup>h</sup> close - but it do absorb the  
venous & intestines - but inferior foetus - & amnion



144 I furnished & various fluids - surface - Wh  
Lig Uterini disch fast new union & Aseptol  
also disch it - Case also where Duodenum in  
repented & stomach - Lig Uterini has antiseptic  
properties, see pencil sc. - I also exists in increase  
ration to the size & factors - Harwin - suff also  
nourished & Lig Uterini - But the organic  
tion & factors but little exercising.

of Extra-uterine <sup>Conception</sup> Pregnancy - find in the  
Hall of H & Low - abdomen - The term is improp-  
per - as conception is also in ovar & extra-uterine  
Many proofs that it takes place - Whereas it  
occurs and there is an afflux of blood & chorion  
adheres & surrounding parts - Factors per infer  
3 Species - 1<sup>st</sup> Tubal preg - 2<sup>nd</sup> Ovarian  
& 3<sup>rd</sup> Ventral - always a difference & rep wh  
nourish the factors - When spermatie increased  
Tubal, When mesenteric, abdominal or vent.  
Ovarian Lb divided - External & Internal  
Tubal external & internal - ext wh & vestib  
or entrance & tube & inter wh & cavity & tube  
Ext: Tubal & ovar in continuous longer than  
the internal as in room - Cases wh the



foetus & tube rare - ovarian most rare. 145  
Whatever impedes it pass & ovum may rise  
to extra uterine foetation -

Symptoms - Div into Equivocal & Certain -  
but equiv, uncertain - freq lat pains come on  
about 8<sup>th</sup> or 9<sup>th</sup> month - Sometimes the Uterus is  
ruptured - Only can decide by exam per  
vaginum after 1<sup>st</sup> month - Difficult to disting  
between fallop tubal ovarian & abdominal -

In it 2 first the Uterus undergo some alteration -  
Mobility & Uterus greater when & ovary, than & tube -  
Foetus rarely seen long than 3 month & & tube -  
Mother per dies about the 5<sup>th</sup> month - some exp -  
Patient dies fr hemorrhage - Where the child seen  
long & abdomen, the women may again conceive  
Sometimes cured by suppuration - Interment Pullin  
Anodynes &c - Laparotomy, Urine - Several Advice  
Gastrotomy - vide Barnes -



D. Gibbon Thursday.

Cancer - Penis - occurs - body & glans & prepuce & corp - penis - Most freq in ring experience commences - substance & glans - Prepuce - ragged & ring & surface painful w<sup>th</sup> last fungus & bleeds & slightest touch, gradually increases - sometimes unites & becomes indistinct & subst & glans -

Glans - grows at one spot - beside the frenum, gland & glans - but beside the urethra. Sometimes penis increases but slowly - at other times very fast - & removal success - Cases.

External violence - Case a sailor - owing to bruise.

S<sup>d</sup> not conf cancer & Penis with o<sup>r</sup> diseases. Partic Ven Warts - to be removed through ignorance. When prepuce covers the glans, slit it open & expose the <sup>several mushrooms</sup> Ven Warts, have a broad base & narrow pedicle. & cancer different - Vide C. Bell - In Cancer - distinct, solid, hard, tumor lancinating pains - In all cases every visit must remove the penis - but when the point is affected no care in removing. But on L & R success when penis only & Best to take off it one stroke & knife - S<sup>d</sup> not



effect it must as retraction in the place - 147  
Only moderately in the thick. See 4 or 5  
arteries are to be taken up. Can easily be seen  
red unless it retracts - & then use warm water.  
When divided use soft lint & ointment & need not  
use catheter -

Cancer ~ Scrotum <sup>or Testicle</sup>, more common than can-  
cer ~ Penis - in commence <sup>covering</sup> ~ Membr ~ Test,  
Scrotum, spermatic cord & body ~ Testicle -  
In frey - ~ Scrotum - hard tumor extending inward  
to the subst ~ testicle - & then runs rapidly -

When commences ~ subst ~ testicle itself - & fungous  
arteries does not protrude fungous & thinks it  
differs fr common Cancerous ulcers per can-  
cres ~ sub inserting membranes - Now can  
by Lawrence - treated by cutting of fungus, & after  
not necessary to the cure - When the T. is in early  
w/ any inter or exten in calc upon success-  
ful oper if it cord is not affected - But w/  
tumor extends within the abdomen ring - operation  
useless - But w/ not large, & painful, no fung  
operation is to successful in 9 cases out of 10 -  
Operation - grasp tumor ~ left hand - oval incisions



148  
cut down to the subst<sup>n</sup> testicle - & apply  
ligature round the cord - examine whether  
hernia exists - when fluids exist open the sac  
& examine the intest<sup>s</sup> protruding - Th<sup>o</sup> avoid the  
vas deferens - Home's plan two ligatures, pass  
needle through the subst<sup>n</sup> & cord & tie one on  
each side - & prevents cord slipping off - the  
occurs from coughing, hernia, when retraction  
takes place must dissect up the muscles & see  
the vessels - When the cord is tied, can be  
separated & tumor cut out - Then apply 2 or  
3 sticks or put nothing but pledget of lint  
& bandage - Before operating ascertain th<sup>t</sup>  
it is truly cancerous -

Cancer Scroti or Chemney's Sweeper cancer.  
Pott. occurs in all parts of body - Gardner's says  
few occur th<sup>o</sup> rare - 1 in 100 - in occurr. & in  
occurs in this country & thinks negroes not subj<sup>ect</sup>  
prone to fatal unless removed.

Cancer of Rectum - Less fatal, diff<sup>er</sup> to re-  
sect - can occur in ext<sup>er</sup> & rectum or high up.  
allied to stricture & rectum - & often produced  
by long residence to relieve stricture -



Hard tumors, glands affected - Diffie to 149  
disch feces, ant hemorrhage, diarrhoea  
& bowels affected - Sometimes commences as a living  
membran put to fatal - It<sup>d</sup> disting it from  
a tumor w<sup>h</sup> orig a living membrane put, with  
broad or narrow base, when not painful, not  
ragged & the fing c. b passed round the tumor,  
& c b forced out & rectum, the place over  
steamy - when protruded, pass a needle through  
the <sup>base</sup> neck & tumor & tie on each side - Cont.  
Piles mistaken for piles - gen external -

But where lumps, ulcers & ragged sores it  
is cancer - & It<sup>d</sup> be alleviated by injections  
of laudanum, sometimes glysters are painful &  
then interior solid spum - It<sup>d</sup> not use bou-  
gies - or sponge tent -

Cancer of Uterus - occurs in adv age - & w<sup>h</sup>  
hard labors & many childr - gen commences at  
the cervix & commences a adj part - pain in  
uterus thighs & back - acid discharge & v offensive  
Must pass the finger into the cavity & uterus -  
Sometimes cancr or Syphilitic affections -

Low diet, quiet recumbent posture, purgative



156 medicines, leeches & issues - useful - for  
fatal - can only moderate the symptoms.  
Pearson aqueous regimen & low diet - for fatal  
in 1 or 2 yrs. Dr. Seldan exceeds 9 or 10 yrs.  
Extract L L perf by Dr. Hander - <sup>of Göttingen - 9 cases</sup> aimed re-  
designed thro the uterus & many Hermet.

Dr. Hare Thursday Dec. 16<sup>th</sup> 1819.

Flame of Hydrogen not visible in bright sunshine  
this proves that oxygen do not give out the light  
in combustion - Charcoal gives out a great deal  
of light when burnt in oxygen - Argand lamp.  
consumes the smoke & gives greater light.  
By mixing turpentine with the Sulphuric acid <sup>and</sup> the  
breaking the hydrogen, makes it burn with  
much greater light owing to the carbon offor-  
ed by the turpentine - It also renders alcohol  
more luminous - this property is discovered by Han-  
z Water-burner. The reason why flame is  
smoky is because the hydrogen has a greater affinity  
for oxygen than carbon & when the affinities  
are balanced the flame is bright. Hydrogen  
is readily ignited, by flame, by red hot iron, or  
by the electric spark - Hydrogen will not pass



in a state of ignition through a thin metal tube 15<sup>th</sup>  
tube or holes. In H. Davy also found that the igne-  
tion could not be communicated through ~~the~~ a  
very fine wire some where constructed the  
safety lamp for miners &c. - Comparative  
properties of the gases - Nitrogen present affix  
for caloric - Hydrogen when combined with  
oxygen gives out its caloric - but is not in itself  
inflammable & therefore resembles nitrogen -  
Chlorine seems to have a midway character  
will combine with metals & w<sup>th</sup> carbons -  
& like <sup>nitrogen</sup> ~~hydrogen~~ carries its caloric into combina-  
tion - The most powerful explosion compound  
is the a combi of Chlorine & Nitrogen - I think  
that heat is a matter which has its combina-  
tions enters into combinations & becomes  
solid & tho not appreciable by weight is most  
help - Explosion of heat of oxygen & Hydrogen -  
The most remarkable effect of Hydrogen <sup>is</sup> ~~was~~  
producing water with oxygen - Lavoisier - 1 vol H<sub>2</sub>  
& 2 vol oxyd water - This is the synthesis - The  
analysis is effected by passing water it is heat 83  
By weight 11 parts - of Hydrogen in 100 parts -



Stomach theory - says 11-754 - 88 - 2<sup>nd</sup> 6 - oxygen -

D. Gibson - Friday -

Fungus Hematodes by Spongioid Tumor - Burns  
Medulla, Tricoma by Abernethy. Burns gave the  
face of a - Distinct from Cancer. Fungus Hem diff  
from every oth. disease & sensitive skin process -  
A scirrhous tumor per hardy & striated, cells cont  
soft matter, fibrous substance comp of painted parts  
scirrhous radiates & fibrous - When ulceration  
the fiber mass is converted into thin colorous matter  
& morbid parts involve - also conf to cut  
about a body, & pecul to old age - But Fungus  
Decent - is large soft cluster & fluctuates,  
no stria but white soft pulpy medullary matter  
cells w clotd blood, also w ulcerat fung it  
out & increases rapidly, large & dark colored.  
Also appears in organs w cancer not found  
as Liver, Spleen & Lungs - not scirrhous, as  
the latter is a greenish prominent matter, & so fun-  
gous, not fatal. But Fungus Hem fatal & is a Dist  
inct dis. 1<sup>st</sup> Mention Where it arises -  
Wardrop - When in the eye the disease existed bef



vision destroyed - & concludes that fever 153.  
hematodes has its orig in the Nervous system -  
But Dr G. thinks it dep primarily upon a dis-  
coidit & vascular system - Because - The tumors  
~~commence~~ rapidly, & after slow, then rapidly,  
sometimes have pulsation - 1" Caused by rupture  
& blood vessel - it is very vascular in its structure -  
& in the centre a very vascular organized nucleus  
of the blood vessel & neighborhood in tumor - Some-  
one concludes it is a dis & vascular system -  
Pott describes a dis & leg owing to vascular origin  
commence under the joint near vessel - & in the  
the skin, cartilage hard & seems to coat a fluid  
resting & bones, must make a deep opening -  
& but little discharge, & put death by fever &  
mortification - & when dissect the part till out  
w b f dis, the muscles best & bones caries -  
Dr G thinks Potts case a few Fevers been -  
H. Eye - ball - in a few - conformed to cause -  
few att but one eye - but both - 1" dis is ch -  
pupils <sup>greenish blue</sup> & iris does not contract - commences behind  
& a ret - adv forward & vit humor, increases & looks  
ragged, some refuse to see - & progress



154. iris involved & fairly pig thro' it cancer.  
sunt. H. blebrous - Enlarged rapidly, ext  
over the cheek, very vascular, bleeds freely, <sup>A. Cooper says it is</sup> about  
flaps & red & fair has discolor, peculiar to  
early life & disting in this w fr cancer - &  
thinks Desault confound H. H. w cancer -  
Differ to disting - H. H. vivan corn & post  
cancer sometimes cut the sides, etc. in some cases behind also.  
post. & eye - See H. H. ever more rapidly  
& attain greater size, purplish yellow col.  
white lines or streaks & vessels on surface - <sup>Suppurous if cancer is red or brown</sup> - Med  
allary matter fairly observable - but <sup>it is</sup> difficult  
& imp of <sup>in some to discriminate</sup> cases - On Diffest - Wh<sup>ch</sup> cont eye  
changed, humor absorb & occup a morbid  
mass & retina - retina lost, discoid mass  
resemble to brain, sometimes diff - brain in  
consistence, colour; also varies, sunt black  
w pigist thick, case by Wardrop, & supp it  
prod a morbid secretion - black pigment -  
Optic nerve also of liable to be affect - it is  
altered in colour - not divided, sunt the  
whole nerve is lost or surrounded - neurilem  
sunt changed - Choroid coat sunt changed  
thickened & reddened, sunt seen in part



not & in ott parts adheres - The sclerotic 15-5  
is coat is injured, not before when it  
adheres - When the glands & about & dis, they ex-  
hibit the same structure - Treatment  
but one remedy extirp. & sh. only to be  
early, remove eye & cellular membra-  
n but not removed. H. H. ~

- Extremities - Shoulder joint, thigh, & knee  
oftenest diseased - also character - same ap-  
pearance History -  
All small tum. 1: disc, var. in size & num-  
ble to the egg, but loose & moveable, <sup>usually</sup> not  
deep seated, but not common deep on the bone  
wh. cover by aponer effen - wh. is fascia, soft  
& fluctuating, but conf. w. mens. &c, increase  
is variable, but starting ott rapid, studded  
w. knots & project, res. anticlock, & bad symp-  
tom - redn. & pain precede ulcerat, when  
ulc. painful & fungous, very irasc. & res. a  
raspberry, fetid sanies, wh. large veins  
bec. distend & varicose, & coldness & extr-  
fr. pressure - are generally stung w. it aff-  
of varicose veins, wh. dis. abo, about gl  
become involved, extend & abandon, & dies



156 by Beattie's fer - On Diff. - Dis capsule  
when cut medullary matter, cellular  
struc, col not unif, but yellow res-  
eff, oft puts res liver, unusual pale flesh,  
& indist, wh abs glands & diff off dissecd  
Scul is th history wh it attack th exten-  
but all efforts to sec - it unavailing -  
But In no instance is extirpation effective  
only remedy is Amputation - I even here th  
thump sometimes see dis - Sh<sup>d</sup> also tell the  
pat, th amp is th only rem - & ev th in fact.  
I have seen many cases - Case - 16 yrs of age -  
Left contus small tum, some pain but incr  
in size & became painful, still inc - aff f  
med aid, intern med & local appl, all failed.  
crops growth opened the tumour & blood evacuated.  
tumour size a globe, fungous & bectic -  
On Dissect - Tumour involv th greater part an  
elastic, when cut into the tum, the part hard  
& cartilaginous, & very firm, more so than usu-  
al - above & exten - across process, bone rough  
& bare, no capsule & joint, abs glands dissecd  
& involv & mesh - Case 2 - Knee joint - slips



a foot while dancing - in a few days much <sup>132</sup>  
swelling, increased slowly, in fact exercise & rest  
used gave no relief, in <sup>physicians</sup> supposed cancer  
of the abscess, the scrofulous, and the puff  
right breast & chest - supposed aneurism -  
called in aft 6 years - find the dis involved  
the whole knee - amputated. The thigh as high  
as possible - & perfectly recovered - Dr. Dwyer  
H.D. discovered - Case 3<sup>d</sup> one lower part a  
thrust - fr. blow - thigh - died - undisputed.  
Case 4<sup>th</sup> - one a calf a leg - died under the care of a quack  
Case 5<sup>th</sup> Carpenter - <sup>back of</sup> hand - caused by amputation -

Dr. Hare. Friday Dec. 17<sup>th</sup> 1849.

In coming to the composition of water we  
come to <sup>1<sup>st</sup></sup> applic - atom theory. The basis  
of this theory is the <sup>2<sup>nd</sup></sup> particles <sup>in bodies</sup> are indivisible -  
For example - Combination of oxygen & carbon will  
only combine in definite proportions - if not why it?  
the oxygen not separate itself with <sup>itself</sup> the particles  
of carbon - Only 2 <sup>proportion</sup> of carbon with  
oxygen - 1 Carbonic acid & carb oxide just 1/2 of the  
influence - carb oxy - 75 - 100 - <sup>or acid</sup> - 100 to 200.  
It is & is unite in det. proportion with a weight



158 Some had carbine only from prof-  
at water, ratio by weight is 7.5 to 1.  
D. M. even 8.5 to 1 - Wt 1 to 1 - being - 1 to 2 to  
1 to 3 quarter - Water is dec by acids, heat & electricity.  
Hydr & oxy count on in heat when form of appears  
for up state the wt in count in water.  
A cert quantity of water is spent to atmo - air  
permit without it. In Paris the air is said  
to have an increased capacity for moisture  
by passing it over fire or stoves &c - Air also  
will displace moisture even in cold water.  
Clotter dried air thawing - As Hydrogen  
& oxygen low the gaseous form they will give  
out much caloric & in this, <sup>massed</sup> diffused heat  
much greater than carbon as the carb acid gas  
formed requires caloric & it is no diff to con-  
fine Hydr & oxy gas, will go the a leak the  
oxy in atmo air or in penetrate -

D. James - Friday Dec. 17. 1849 3 1/2 O.C.

Signs of Pregnancy - important to be known -  
3. Situation - When young & recently married  
when illegitimate, & ~~the~~ cap & menses -  
Not easy to tell immediately after conception -



Many signs may arise exclusion of pregnancy - Uterus proper great irritability & many pathological sympathies - The greatest is the breast & 12 yrs is enlarged & shooting pains - mammae -

Stomach generally prostrated - Stomach is disordered - nausea vomiting cardialgia & indigestion - flatulency & morning after rising - When it goes off festus dies - Depressed appetite - Liking for particular articles, hence lounging - Not confined & stoma. but extended - Menstrual - Disordered & constipation - System generally is not affected - emaciation, & febrile symptoms, irritability & mind -

Brain heart & lungs are secondarily affected for the stomach - but convulsions, palsy &c -

Uterus also obstructed - Some women have peculiar affections of the best signs - some toothache other salivation, after all very uncertain before the 5 months -

Diseases of Pregnancy - Div into early & advanced pregnancy - or before & after quickening happens & end ~ 16<sup>th</sup> week - some sensible of it others not, but fainting & hysteria - if sick previously, few her better - Sometimes so slow



160 of other facts - it is felt in transit -  
~ Early in the day the dis. dep upon the irrita-  
tion excites ~ Utters - Irritability - Stomach -  
when just onset of Spec. then Rheo to open  
the Bowels - The Pulv Colomb. 15 or 20, ~~to~~ die.  
Bowels can be kept open - where sickness contin-  
ues common Saline draught. Acidity is owing to  
the morbid accum of Phosph acid - D.S. uses fine  
ammonia in every case of acid -

Calc: Magnesi

Aque Magnesi 35f

Spt. Ammoniac

Aq: Amm. P. 3i

500 or three spoonfuls  
to be taken either  
occasionally, or when  
the symptoms  
are continued  
after every meal.

When vomiting is incessant & proof of strength.  
Leeches very useful ~ put ~ 10 on the throat to food.  
Constipation a usual attendant - Laxatives -  
Eucema - & break down feces - Laxatives: Ol. Ricini  
Sulf: Mag: - To per Roasted apples, Steamed Prunes  
Fruits ~ morning fasting - Case - Hey - husband  
relieved by catheter - & after



Dr. Gibson Monday Dec<sup>r</sup> 20<sup>th</sup> 1819.

161

Gonorrhea is apt to attack the <sup>stump</sup> ~~stump~~ after amputation -

Syphilis - Some doubt whether gonorrhea is a syphilitic disease -

Gonorrhoea. Acute, suppurative, discharges -

Dr. Smead's term Bleorrhagia - improper

History - It begins with itching & red & swollen  
neck red & swelling & flow of next matter disch.  
pen pain is very severe in passing urine - In the  
commence of flow, see large red & shining & slight  
excor & flans, penis is swollen, the urethra dim-  
inished in size - & tumours throughout the urethra -  
they are the mucous glands infl & not inflammation  
Charac<sup>r</sup>, is a spasmodic affec arising fr irritation  
hent from & short, not owing to coag lymph  
or carious spangiosum - In gonorr the mucous  
bec charged & is pur, part becomes thick & yellow  
& sometimes greenish - Matter is only formed from an  
exit to l's fr the end of urethra - disease & is extend  
throughout, & absol dis & is extend only arising  
from hyperaemia, & venous.



162 How communicated -

Symptoms cont - inguinal glands become infla  
& lymphatic glands & down penis infl. Testes  
are liable to be affected. but not at the com-  
mencement & dis -

Bladder is liable to be off, w<sup>h</sup> Hæm. Hæmorrh.  
diffic in voiding urine comes away by drops -

Inclination for stool & hemorrhoids - all these  
symptoms arise from sympathy - Swelled glands.  
& no urine from absorption - There is no ulcer-  
ation of the urethra - Proven by Bell -

& origin & Nature of gonorrh - 2 doctrines -  
1<sup>st</sup> allud. to Lues venerea - 2<sup>nd</sup> specif distinct -  
Hunter add the first. Says an L & commen-  
& South sea Islanders - from gonorrh - as chan-  
c<sup>r</sup> not contin so long, time destroying the penis.

Wallace & Benjamin's Voyages - In opposition D<sup>r</sup>  
S. states that the matter is frequently a long time  
in the system before ulceration -

2<sup>nd</sup> case of Hunter is a gentleman who had syphilis  
ulcers in throat & thine after gonorrhoea -

But no one had had commin or others after  
& the ulcers in m<sup>h</sup> been venereal -



3.<sup>d</sup> Case of Hunter inoculation, applied matter  
 of gonorrhoea to the prepuce, & ulcers were produced  
 with buboes, ulcers & testicles & were finally cured  
 by mercury. If this is entirely correct it wd  
 establish the doctrine. B. Hunter could not be certain  
 other arguments against it are that matter <sup>of gonorr</sup> ap-  
 plied & plans will not produce chancre. How  
 & Chancre will not produce gonorrhoea, when  
 applied to the urethra. When both diseases exist  
 in a case for 2 infections having been common.  
 Why does gonorrhoea get well & chancre worse -  
 Hunter's advocates say the absorption of matter  
 is not produced in gonorrhoea because no ul-  
 ceration - But again not good - as the ulceration  
 sh<sup>d</sup>. always take place.

I reply is the gonorrhoea can be cured by external  
 remedies & Chancre not.

4.<sup>c</sup> Gonorrhoea has existed long before syphilis  
 mentioned in scriptures, while syphilis was  
 not known bef<sup>t</sup> siege of Naples.

5.<sup>th</sup> We require the same treatment, wh is in the case -  
 The diseases therefore are specif different.



164 It is uncertain at what period the gonorrhea begins  
after the application of matter. - per bet 6 & 12 days.  
Inflammation state may take place at a considerable time  
before suppuration is established. - The course of  
this urine for free of constant <sup>or</sup> the existence  
of another action. - After some time symp-  
toms subside - & running still continues -  
called pleet - some suppose this not infec-  
tious - B. D. S. considers it Chronic gonorrhea &  
tho' not so apt to infect, still possesses the power.  
In Women not so painful - & can be confounded  
with Fluor albus - Difficult to determine whether  
gonorrhea in women exists.

Treatment - many remedies - Shall only re-  
sult as one of decided adv. - See Rem. co-  
n. prove of much service, only as the disease  
is extended & system. - Thus the local affection may  
produce few de. - I deem. See rem. - vs, Purg  
Diaph. = In all cases every kind not, vs, Purg  
times & in some cases more useful than vs.  
When constipation sympt. & uric. - Diluents  
serviceable - also Dietetics -



Best remedies are local - Emollient poultice  
best wth much inflam - covering th glans penis  
& scrot - aft infl is subd - injections - th<sup>o</sup>  
be mild if any - Oil, Milk & Water do -  
aft - strong inject not used - Oak bark.  
P. Bark, vitriols & mercury, alum -  
White vitriol best - 3 a 5 gr raw Rect & Phurb -  
with Zingib ul & aqua - not used fr 6 or 8 times  
a day - Bad eff are Venereal tumor - or  
a strength & injection - They also produce stric-  
tures in th Urethra - Dr J. uses the vinous R of  
opium diluted with 2 parts of water & gradually  
increased - Lunar Caustic - mixed with sweet  
oil as a bougie & passed into the Urethra -  
Dr P. uses th diluted Nitrous acid - applied to  
the very extremity of the Urethra - ʒss - ʒij of Water  
In Chordae rem fr & local vs, opium & camph  
phor, Poultices & foment, Steam, leeches -  
after inflam is removed the capfulable lymph  
Mercuri bintu, Cicuta, Elect.  
When Bladder is affected - Vesica a Pinu  
& opium vs be -



1669 In German Humor - vs. Poulaines, Boudier  
opium Reticia. I some recom bougies  
to bring on the discharge. Sh<sup>d</sup> be cautiously  
used. When swelling continue give mercury  
& electricity

Flect. Many rem - skin dematit Bels  
Copaib: n b used for a early stages  
Local remedies - Hygians, or Med Bougies  
Gen m? Corros Subl for a Zyg water.  
Bougies better kept in 10 or 15 minims.  
Read Hunter - for altho wrong in theory  
Best in practice & m info is to be der  
ived from it - The work of B. Bell tho in  
common use in this country is but  
a trivial production & not worth notice

D. Hare Monday 20<sup>th</sup> Decr 1849 -

Water in some alkalies, as Potash & Borates  
Shroutides resist the action of red heat &  
can only be separated by chemical affinity.  
Some salts contain no water of crystalliz  
Water must, if any, be considered as the acid  
forming principle. Best Proof of the compo



sition of water is the galvanic apparatus. as we are able to obtain both at the same time. Electro caloric is a great suggestion in nature it makes & unmakes many things, is the most powerful agent of Chemistry & will probably explain many a Phen of Nature & the effects of it. Water has also been decomposed by mechanical electricity or that generated by the machines, but in very small quantities. When potash is off a galvanic apparatus Potassium & oxygen are formed this effect also takes place when heated in a Bunsen. The Potassium possesses all the properties of metals except their weight. The test of alkalis is the Brazillietto decoction - forms a brown precipitate. Expt - Potassium in the H<sub>2</sub> Decoction or water produced a beautiful rose colored flame. The water is decomposed the Hydrogen is inflamed.

Review - of the experiments - Formation of water overturned the Doctrine of Phlogiston - Lavoisiers theory is far true tho' remains in some points left probably a combustible. The supposition the Hydrogen was a component



part of metals again revived the principle of  
 Phlogiston for the experiment. To prove it  
 completely overturned it. All volatile substan-  
 ces are inflammable principles - & if charred.  
 & by converted into vapour it m<sup>d</sup> be an  
 inflamm principle itself & not contain an  
 inflamm. Combustion is the chemical action  
 which produces light & heat. The fire of volca-  
 noes is diff fr it's surface, for we can  
 suff fr it is a sufficient quantity of oxy-  
 gen to supply to meet a fire - Prussic acid  
 is found to contain no oxygen - & Sulphur-  
 retted hydrogen support combustion -  
 Rationale of obt oxygen - at a high temp it  
 heat overcomes its attractive power betw  
 metals & oxygen & they give it off.  
 What Scheele supposed an ~~absorption~~ evolution  
 of Phlogiston. Lavoisier proved to be an  
 absorption of oxygen. Of Respiration - Does  
 not think the <sup>real</sup> capacity of arterial blood is  
 so much to its application as we suppose  
 it done by some large system.



189  
& Respiration is founded as well on Vital as  
Chemical action - & full health is necessary in  
making experiments - The respiration of Plants  
is immense that of Animals - oxygen is given  
out -

D. James - Monday Dec<sup>r</sup> 20<sup>th</sup> 1849 -

Hemorrhoids. Laxatives - Warm bath not good  
Best bet after Local sepl by leeches or cold solu-  
tions of lead &c - Best ointments are those containing  
acetate of lead - Spt oil of Turpentine in doses  
of 20 or 30 gtt ter die - recom by Dr. Keen -  
Dianthaea - 1<sup>st</sup> Emetic, then rhubarb, & opium  
Strangury - causes Sympathy between the neck &  
Bladder & Uterus - Case - Also from pressure on  
the neck & bladder, produces infl & neck & bladder  
When fr press not rem bef deliv -

Attendant vs, purgatives, demulcents flaxseed  
Barley water, & oily medicines - drank copiously,  
or small doses of laudanum -

Suppression of Urine - either total or partial -  
~~sometimes~~ ~~causing~~ no danger if properly treated -  
goes off when uterus enlarges - change of posture



170  
recumbent posture, Steam of warm water.  
& bladders for relieve it, if not we use the catheter.  
Introduction - Lay a back, on the right side tied  
& introd 4 hand under the right thigh, the mouth  
w<sup>l</sup> b found just under the acet & pubis - When  
no catheter a common quill will suffice.  
When the uterus is retroverted we depress the catheter  
behind the symphysis pubis - Vide Bell - Some  
times causes retroverted uterus -

Retroversion of the Uterus - rarely occurs  
in a state of nature. owing to extreme refine-  
ment of manners - Dr Hunter first described it in  
England - in France by Gorgonne 1786 - before  
Hunter - More liable to take place in 2 cases,  
where great concavity of pelvis, or deformity  
before the 3<sup>d</sup> is too small & after the 4<sup>th</sup> rises out of the pelvis  
occurs betw the 3 & 4 month - Reg<sup>d</sup> & Dr Hunter.  
Dr Denman first described the true cause -  
viz Suppression of urine - so th it is the cause  
& not the consequence - It is also the predispos<sup>d</sup> cause  
& occasional cause sometimes - External violence  
can seldom cause Supp of Urine - until  
after the 4<sup>th</sup> month - Seldom happens in France.



191  
owing to fracture of pelvis - In examination can  
feel the fundus & cavity & pelvis - Nature  
unscripted <sup>treatment</sup> ~~graft~~ never cure the disease as Hadde  
w. rupture - Draw off the urine - & depress the  
catheter in passing it - the flexible small catheter  
is recom by D. Deuman - after this, give an  
enema to procure stools - must use the catheter  
2 or 3 times a day - When about to assist its re-  
turn - place the patient on her knees & endeavor  
to raise the fundus, or not use much  
force - use pap 2 finger rectum - if not success  
Use Delig Urine - Then intro pessary, &  
recumbent posture - Case D. Senter, paracentesis  
vesicae - & successful - D. Hunter thinks the uterus  
is 6 punctured - Case puncture & uterus & porter  
part & bagium, successful - but dreadful symp-  
toms w the course - Sabat rec punct the bladder  
above the pubis - 2 new methods: in France  
Gardien advises Synchoukounin - & Capman  
advise puncting it to one side & pelvis - & put it  
up - may be tried - D. Collins, Goures - recom  
meds cold vinegar & water after reduction -



172  
Dysmenorrhea may take place at other times  
bes frequency, owing to suppression of menses.  
After birth & a cessat & menses. It usually  
occurs at 2<sup>nd</sup> or 3<sup>rd</sup> day, tho has occ<sup>rd</sup> 9<sup>th</sup> day -  
Case by White - rel by cop. evac of feces matter  
& & pained by enlarged ovarium - &c.

D. Gibson Tuesday Dec<sup>r</sup> 21<sup>st</sup> 1819.

of Lues Venerea - or Syphilis. Need not  
enter into its origin: 1<sup>st</sup> Seat of the most can aff  
on Chancere - most liable & places, viz & prepuce  
frenum & corona glandis, also lips, eyelids,  
&c - from matter lodging & canities seldom  
occupies prominences - In Women labia & mya  
all perineum & vagina - see in extensive  
& numerous in women - Physicians have contri-  
buted the disease - & surgeons &c - When a scrotum  
or bad & per - & pimple the scab & if not  
shed off ulcer is efford - for lip pain &  
infl & not a prepuce - It itching & place, pin-  
ple - lip infl & pain & place than prepuce - &  
in every direct - The base is hard thickens  
& elev & edges elev - The thickness is an exact



lect diagnostic - & when hardness remains  
 danger of breaking out again - Edges jagged  
 & hard & the mixed matter - Not hemorrhoidal  
 unless when disch. - ~~See~~ appears at differ times  
 sooner & freer - not so soon as gonorrhoea  
 in general better of 45- Day. As long as it is  
 an aff. of system m. be considered as local.  
 In Bubo - more to Hunter every swollen gland  
 m. be called a Bubo, but a Bubo not never  
 as an arise fr. diff causes as wounds - Ven. Bubo  
 is it aff. & abscess & ven. vice - may arise sine  
 the existence of any prior local complaint -  
 a? from wounds - 13? fr. Ulcer - Absorbs  
 one life freq. aff. of glands - Lymphatics some-  
 times suppurate - & small abscesses - There is fre-  
 quently some inflam. before suppuration -  
 In Men & groin - & nearest the chanc. -  
 In Women glands & lab. & round lig. -  
 Hunter supposed it ven. glands - m. be ven.  
 but he afterw. find it the matter of Bubo is  
 infectious - Hunter says but one gland per-  
 diseased - R. D. G. thinks not for the case



174 Several glands usually affected - Buboes  
for commences with throbbing - & enlarge-  
ment, no ad swelling is uniform & then  
becomes diffused - Not so moveable - & not  
is retarded for some time - But for matter  
forms rapidly - skin at 1: bright red & then  
purple - pain great & ulcer not less extens.  
surface for yellow - when ulcerated there is  
but little diff betw it & chancre - B of  
Ulcer in a conf w Scrophul - B latter  
least painful, & slower; ash colour -  
do not prove for color - & then not so acute  
& seldom suppurate - & matter slow -  
not for Ulcers & legs in wounds & feet &c - & diff  
icult to discriminate for ven: B. - the b conf  
w Hernia & Anemur -

of Secondary or Constitutional Symp toms -  
owing to absorption & matter into the system -  
the for arises for chancres - but also for ulcers  
in any part of body - When taken in eff  
& soon perceived - Some parts are liable to  
it - skin throat, tonsils, nostrils - then



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fascia percont. & bones - Periton att to 1<sup>st</sup> to  
being in off to cold - The secondary ulcers  
not contagious - 1<sup>st</sup> of Secondary Ven Ulcer  
in the pl on diff parts - in readily on new  
cut membranes, round ragged & irregular, in  
heal at one pl & trace a snout - in free off  
the throat - sets any free infl or swelling  
& ulcer to free - ragged & raw w be in as Col  
matter & travels faster, sets painful & loss  
of substance, has white matter resen slough  
w can be washed away, & new scales -  
in to conf w oth Ulcers - Cym Tonsil -  
but it later free painful - also in to conf  
in indolent, tumef, & tonsils, when lymph  
can be removed not venereal - D- Adams - says  
Ven Uls free for pain, tho in also - it not  
decide hostility - Per free observes its progress  
best to delay a little - Tonsils, soft palate  
& Uvula in free -

Next Ven Erupt - in to part or free - beg  
in small discol spots, then mottled - sometimes  
pimples - scab or scurf forms - & after



176 This ulcer forms - Part <sup>roots &</sup> falls - Nails &  
affected, nails drop off & Ulcer left - Hair  
is destroyed - Run off a Tend, Pericost & Bone  
are worn in their course & all parts that  
are so soon affected - 1<sup>st</sup> Swelling - Cylind  
Bones partly Tib Rad & Ulna - for con-  
sider size but noticed - called a Node -  
then swelling on & dist fr Rhew by not  
attacking the joints - pain in bones & thro  
out the system - flat bones also are dis-  
tended from on the scalp - & bones not best  
& some more effused - or frontis for dis-  
tended Syphilitic bones are generally heavier -

If Warts & Excrescences - for & for  
narrow neck, broad & expanded on surface -  
& res mushroom - fissi condylom & nodules  
but form - (vide) -

There is for for in soft & in adv stages  
Bacteria - might be - & lumps but are off  
& then fatal -

Treatment - 1<sup>st</sup> Chance - as at its com-  
mencement it is local. 2<sup>d</sup> & 3<sup>d</sup> & 4<sup>th</sup> if this



177  
close - but safe to trust entirely to local  
remedies. For Loc rem - use such as best  
it specifies out a sore - Escha - with hy-  
drate of zinc & Quicksilver & continue for  
several minutes - But one, at the same adv -  
Only specific is Mercury - run to the along  
or loc aff - for if Cal has die - or Merc  
ointment inside the or groin - It<sup>d</sup> be contin  
until healthy aspect or are healed - Slight relief  
from suff - run drop it ch or more ointment  
or Calomel - When indol Preps Rubr -  
Blaze hit, & others - For Merc Hydrate  
useful as wash - Hunter Extra Remedy &  
Scrubbing - Phlegm & Paraphlegm -  
of Buboes - It<sup>d</sup> 1<sup>st</sup> being on resolution -  
Mercury - As purg - from & emetics de -  
then & only to def on - Must 1<sup>st</sup> pass throo  
the gland - When a p - rub on thigh - It<sup>d</sup> not  
out the bubo - ʒij or ʒi once a day suffic -  
not less or more, need - but there is no  
resolution & rem schickus - from abroad -  
Poultices - de When this thin is to open



178 when I meet you but - When buto  
lungs & caustic - D. Parvich's salt appears  
by fibron -

D. Hare Sunday -

Alkalies are those subst<sup>s</sup> wh<sup>ch</sup> have alkaline  
properties - Henry says changes veg blues  
to green but this is not the case, with litmus.  
it does not change its blue colour - Litmus  
is a good test as it is kept solid. indirectly,  
it tests alkalies as it will restore the colour  
of litmus reddened by acids. Turmeric is a bet-  
ter test for the alkalies, first dissolve it in alcohol  
& then in water - forms a yellow solution - reddened  
by alkalies & restored by acids - Basilleto is  
another test of alkalies & furnishes a better  
test than turmeric as it is more dissolved in  
the water - Alkalies combine & animal subst<sup>s</sup>  
& especially oily & mucous - Very soluble in  
water - & heat can not drive it off - Render oils  
miscible in water - & form soap.

Potash - obt<sup>d</sup> fr<sup>m</sup> liquor wood ashes - this is boiled  
down & when deep of as much water as for



179

dries off becomes potash - When in this state<sup>179</sup>  
is coloured & is converted into pearl ash, by  
exposing it to heat & again roasted - is not fine  
potash but a subcarbonate of potash - Pure  
potash is made by boiling shelled lime in a  
sage solution of pearl ash in an iron digesta  
by excluding the air & suffering the vapour to  
escape - then let it subside & in a few hours a  
clear solution of potash is above - this run to  
draw off by a siphon - Then boil it down  
to the consistence of honey, add alcohol &  
boil to distill it to in a silver retort -

Rationale - Lime takes the carbonic acid from  
the potash - but lime will not take off all  
the carb acid & in pure alcohol will only  
dissolve pure potash - The affinity for water is  
so great the potash decomposes the alcohol  
& the carbon is liberated - & in this way water can  
be decomposed - Potash will not crystallize  
with alcohol alone, but water is necessary -  
When pure potash is left in air it soon ab-  
sorbs moisture & also attracts fixed air -



When potash is in Chrystals it will not absorb  
fixed air, but does when in solution.

When dissolved in the state of Hydrate potash  
produces heat & when chrystals are dissolved  
cold is produced.

Soda - obtained fr Bailler & deca salt.  
very analogous to potash - Its combinations  
are less energetic, its affinities less powerful  
its affinity for water less when pure - but  
the salts of soda are more deliquescent than  
~~those~~ those of potash - These are called fixed -  
They precipitate earths - Eff - Muriate of Lime  
precip by potash - Eff - Nitrate of Mercury  
precip by Carb of Potash - Eff - Copper pre-  
cip by Sulph Acid by potash.

D. Gibson Thursday Dec 23<sup>d</sup>.

of Organic diseases - & 1<sup>st</sup> Fractures - Define  
Gen Sematti - Dis Fractur - &c - complications.

Fractures & Aore -

Fractures & Face -

Fractures & Lower jaw -

Fractures & Vertebrae -



Dr Hare Thursday Dec 23<sup>d</sup> 1859. 181

Tartaric acid renders potash more insoluble & soda more so. - By adding tartaric acid being added to an alcoholic solution of Potash a precipitate ensues & when a weak soln of soda, the salt remains dissolved & liquid - this is a test - Another test is adding a solution of Nitro-muriatic of platinum to solutions of salt of Potash & salt of soda - Potash precip - soda not.

Potassium comb in oxygen in 3 proport.

1<sup>st</sup> 2 atoms of Potash to one of oxygen - when absorbed in air  
2<sup>nd</sup> 2 atoms of oxygen to one of potash - obt by ~~combust~~ in atm. air.

3<sup>rd</sup> one atom of oxy to one of Potash - forming Potash & water by decomp. of water.

Wollaston's Scale of Chem Expt.

In preparing Potassium - no protect the gun barrel from oxidation by a very inferior tube.

Potassium is a useful reagent of analysis - will act on almost every subst containing oxygen, except at very high temperature - when iron decomp Potassium - Arsenic Potassium, Mercury & adding to it



minute of Ammon

D. Schiön -

Fractures - Clavicle - in freq - 1° & 2° & 3° - muscles attached -

Caused - direct blow or Contre coup - Most in front  
 & middle or at or near the Thoracic extrem - in freq  
 & Contre coup - In & trans or oblique - Wh commu-  
 nity is in freq - caused by direct violence - See Humer-  
 al extrem - & then by P. Shot or Heavy weight - Also  
 Displacement & Stern ext. - When oblique but often  
 important vessels - Just compound, project & skin.  
 Shoulder also falls - Derangement for scapula & Hum-  
 eral frag - forced downwards - Pect & Delt Muscles.  
 Thoracic ext in freq displaced - Distinction Marks -  
 is v diffic - at ascent for a frag - But not with  
 the marks - When shoulder sunk, I cannot also to an-  
 . Can raise his arm & his head in many cases.  
 Other signs - See 1° a peculiar attitude - Desault - Not also  
 the case - Case tumor & neck for Polypus - It is also in  
 a hasty series - Various Machines - Older surgeons  
 supposed the sternal frag elevated & displ. & it  
 endeavor to displ it - but unavail Dis to resist



Then endeavor to raise the humeral end - By raising  
the arm - 1<sup>st</sup> Method by Bandages or rollers - After let the  
ball remain in Axilla - figure 8 pen used still - Heister  
suggested something in necessity - Crucial piece of iron  
res. To with straps at 1, 2, 3. The next machine or that by  
Brador - Corsett - all intended to retract & fix the  
dislocations - Must retract the shoulders - pain  
infl. to - By forcing back the Scapula too far it forms  
a fulcrum & forces out the humeral end - Objections  
a fig 8 is that excoriation & pain are produced - Can not  
retain the shoulders fixed - See Desault 1<sup>st</sup> Objections  
difficulties - 3<sup>rd</sup> 1<sup>st</sup> Over the Should - 2<sup>nd</sup> outwards 3<sup>rd</sup> Back  
1<sup>st</sup> Pad a bumpit 5 inch - 2<sup>nd</sup> 3 Rollers - 3<sup>rd</sup> Comp  
24 Lamps of skin & 5 Bands - Desault's infir super -  
Bay's's appa - Pad - & girdle or buckles - 3<sup>rd</sup> Brace let -  
or straps - Great objection is that it is to the Back



De Hare - Friday Dec. 26<sup>th</sup> 1819 -

Volatile Alkali - or

(A new alkali discovered & detelike - by Apollonius pupil of Berzelius - called Lithina - consists of a metallic base united to oxygen or other alkali).  
 Ammonia - important on accounts & part with  
 & Neartic inf. Proc & decomp of Amine  
 matter - Nitrogen exists in quantity in Amine  
 matter - hence it diff & decomp of Amine  
 Nitrogen & Hydrogen unite & form Hydrogen - prefer  
 uniting in nascent state & form H gas -  
 Has the mechan prop of Atm air - proc & then  
 of Ammonia - for it form a resin in vol  
 sublim. When ammonia diff to be powd over  
 to elasticity & sponging - consists of Ammoniac  
 acid & Ammonia - can be obt for it by any subst  
 which is strong aff & acid, there & the fixed  
 Alkalies & Alkaline earths - Lime is usually  
 employed to obtain it - Except a weak corrosive  
 agent since soluble - Mix Minute of Ammonia when  
 exposed to heat & raised over Mercury - It parts  
 infl in Atm air, but inflame in oxygen



gas - Detonates feebly & Electric spark & also -  
Silvane spark - Melts ice as speedily as fire -  
water combines w it w p rapidity - Eff. impreg  
for water & common gas - takes it up w as p rap  
or w e apply it - Can be also obtained by Disclay  
mixture water from a mixture of Muri acid &  
Lime lime Hy. Am. Pur is obtain - Quantity is  
inf by Atom prop - The comb - Nit & Hydr  
very feeb - & can be up & electr & pale -  
Can be condensed at  $40^{\circ}$  below zero - 3 Hydr & 1 of  
Nit - by weight 5 or Nitrog & 1 of Hydr - Atom  
of Nit 7.5/10 - & Hydr. 5. Under Benz -  
Also prod by exp Atom air to Iron filings & water  
hydrogen is found comb & nascent state & forms Amm  
Laffond to have a Metallic Base - Berzelius thinks  
there is b oxygen in Nitrog - or it w? not combine  
with acids so readily - Another proof - Metal B.  
in its amalgam with Mercury - & if not metal  
D. Hare thinks metal the primary form of matter  
& that oxygen, Nitrog & Hydrogen, have metallic  
bases - Potassium for its softness is to be called a metal  
but for its brilliancy, fusibil, melting is a metal



~~Oxygen~~ is now an except a ferment  
 of alkalies, then Hydrog. a form of Sulph. &  
 Chlorine - <sup>Hydrog.</sup> Nitrogen is the only subst. wh. can't  
 w. <sup>Nitrogen</sup> ~~hydrog.~~ <sup>acid</sup> acidity - & with oxygen <sup>acid</sup> acidity.

D. Pison Monday Dec. 27<sup>th</sup> 1819 -

Fracture - Scapula - Not easily fractured -

Fracture - Ribs - Sternum - Humerus -

D. Hare Monday Dec. 29 1819 12 O'Clock

D. Hare thinks in this case Hydrogen is the prin.  
 ciple of alkalinity - viz Ammonia - Effect of Potass.  
 on Ammonia; forms Azoturet of Potassium.  
 Thenard - Pulvis Sublimialis - Nitre Sulphur &  
 subcarbonate of Potash - All alkalies fuse in  
 our acc: & affn for Water - Sub-carbonate of Am-  
 monia - Carbonate of Lime is now mixed & much  
 of Ammonia & exposed to heat - Two pairs form later.  
 Difference between sublimation & distillation.

Earths - <sup>some of</sup> These resemble the alkalies very much  
 & are therefore called the Alkaline earths - vide  
 Henry for it's definition. All earths are Bary-  
 tes, Strontites, Lime & Magnesia & proper -



also mention - Differ fr. Strontites - in their 187  
imperfect solubility, not their infusibility.  
Have just found them - Strontites & Barytes  
more soluble th lime - forms Strontitic &  
Barytic water - & a pellicle is formed on these so-  
lutions also th of Lime owing to Comb w Carbon  
ic Acid - This eff & in take pl w Magnesia -  
Were supposed to be metallic oxides - & in th.  
day, obtained an amalgam, similar to that of an-  
monia, from the earths -

Barytes is obtained pure & by dissolving the  
Native carbonate in Nitric Acid - or by  
heating charcoal with the Sulph. of Barytes  
a Sulphuret is formed wh is decomp by Nitric  
Acid - Evap th Nitric solution to the consistency  
of honey & drive the Nitric Acid off in a Pla-  
tine Crucible - Cons only be obtained by Nitric  
Dissolved in Water as the Residue of Barytes in Dissolved  
Acid - Rationales - Properties - Takes Sulph Acid  
fr all its Combinations - Exp Sulph Soda dec  
by Barytes - turbid - this is th only earth from  
which th effect takes place - With Strontites it  
will not become turbid & D. Metalell killing  
Takes



D. Hare - Tuesday - Dec. 28<sup>th</sup> 1819.

Salts of Strontites give alcohol & red  
 flame - when burning. E.g. Baritic water  
 turns Brown the salt of Barylic wood & red  
 the yellow termine similar to the alkalis.  
 Strontitic water - same effect. Lime water  
 similar effect. - Barytes flakes when mixed  
 in water & affords a milky solution - same eff.  
 with Strontites. Lime used as cement & impor-  
 tant to be noticed - its history very interesting  
 it was the foundation of Pneumatic Chem.  
 The carbonate of lime water is driven off from  
 limestone by heat. It is supposed that the  
 fire or fixed lime - but this is owing to the  
 water becoming fixed & becoming a hydrate.  
 Lime in cement absorbs the Carb. Acid from the  
 air & reproducing the stone from which it  
 is made. Old buildings harder on this acc.  
 To procure pure Lime, is to take the carbon  
 carbonate or <sup>Paris usually</sup> Oyster shells - when exposed  
 to heat the carbon is given out. The heat given  
 out by flaking is also equal to a low red  
 heat. Neither Lime Barytes & Strontites



act as the alkalies - The strontites <sup>89</sup>  
differ from Lime it resembles it in not  
taking up another dose of oxygen when heated  
or oxygen gas - Barytes takes up 2 portions  
prot & deute oxide -

Magnesia - usually obt'd from Epsom salt -  
which is a small water of sea salt - we b  
obt'd for it & add a fixed alkalies - Not soluble  
in alkalies - more infus<sup>th</sup> - either in soft water  
soapstones own their properties & pres of Mag-  
nesia does not easily - It combined in lime  
Magnesia in lime is injurious to vegetation  
Lime for oyster shells in the best - Eps salt  
Lime of Magnesia precip by solution of pearlash  
this is the alkalies alba & shop - The acid  
is driven off by heat - & sh<sup>d</sup> be  
driven off for medicinal use - Calced Magn-  
esia Dr Hare thinks owes its acidity to pot-  
ash - Retrospect - we recoll't B P L & the  
resid in flav, heat in water & eff a very col  
dif in being in insolub, infusit & pten of spec  
Magnesia differ in lightest & least alkaline  
Barytes differ in heavier & in solub in acid



190 water - But Strontites takes & dissolves in  
better in hot water - in cold 6 or 8 - hot 118  
Strontites & not form dentary & or  
the & Bay decompose all sulphates by  
equal affinity.

Silex - is abundant to any other principle  
found nearly pure or rock Crystal - Silex  
is few pure rock crystal - To test it pure -  
the native crystal regular, & even some  
green flint, pulver & mix w caustic  
potash or soda & rub in intense white  
heat & crucible - The Alkali 2 - earth 1  
part - If reversed the proportions & are  
2 parts of Silex & one of Potash we obtain  
glass - When more Alkali obtain lighter  
Silex or less of flint - The rev is the  
one <sup>as</sup> with Magnesia - the one is discolored  
& earth, the other & alkaline - By Precip  
& acid & solid formed - By - solid flint  
becoming solid by pouring Sulph acid -  
~~Silica~~ Mass of Silica - 2<sup>nd</sup> Experiment  
the Silex remains nearly pure while the  
acid combines w the alkali - A third



portion, & of Sulph Acid same as it <sup>1791</sup>  
& it is diff to separate.

We also to obtained fr flints of lime.

(Pure Chrysolite m. to be formed in nature by  
the boiling point of water being raised &  
deposits the silice at nearly a red heat /  
Silice combines with the alkalies & alkaline  
earths. It is inferred to be metallic it is proved  
to be a robust comb or asper. - Think, &  
L, its have not metallic & a to be asper  
or carbon & boron - & most substances -  
which form acids with asper.

D. Gibson 10 o'clock - a Practices & bleasman  
rubens, ulmus, cypripis, methacarpus & fingers.

D. Gibson Thursday - Practices - Thyrp.

D. Hara Thursday Dec<sup>r</sup> 30<sup>th</sup> 1819.

Sulph of Magnesia is soluble - ott sulph not -  
In Soils - no great solubility not good too easily  
washed away - But ott, wh slowly att the moisture  
better - Lime is found in veget by Sulphur  
rarely & suffice to tell how formed - Elements  
of Sulph Lime Calcium asper & Sulphur  
of Glass. Silice principle & characteristic impred.



198 breaks when exposed to very great  
temperatures - depend upon bad con-  
ducting power - differ structurally expanded &  
& cracked off separately bottles & tubes by them.  
Prisme Rupture drop - When broken - red to flow.  
depends upon undue contact & after lamin.

Alumina - Not a salt of common  
Alum is a triple salt - Sulph acid Pot & Clay.  
Obtained by adding carbonate of potash & alum  
May be conf. & from salt - but taste is  
diff. & can also be disting. by add carb of  
Ammonia which precipitates alumina & not  
Magnesia - Alumina forms plastic sub-  
stances w/ water & communicates it to its cast.  
Resists heat in having an attraction for  
the alkalis & alk earths - & has a strong  
attraction for col matt. used as mordant.  
Furnishes utensils, Bricks, reliefs, &c - Pure  
Alumina is united to them for power as  
it combines w/ so much water that it  
cracks when exposed to heat - To remedy  
this it is blended with siliceous matter which  
will do in alt water - In glass houses



alumina is used in two different <sup>193</sup>  
states - 1<sup>st</sup> Crucibles for glass houses - Porcelain  
diff fr common pottery by having 2 addit  
subst - is semitransparent - By affording  
glass to a subst wh sets it alkali it is con-  
verted into a state analogous to porcelain.  
Lites or suff to camp precious stones -  
B since found the Alumina exists in nearly  
all except it Diam and it also the hardest bod  
Glucine - Aqua, Manina, Beryl, rather an  
object of curiosity - It is -  
Ostria - Thorine - Lircon rest -

ACIDS. other subst besides oxyg & hyd  
and - Water is open to acidity - not itself  
but fr its elements - Here Acid is derived  
fr Vinegar - tho some acids have the property  
of ionizing. Proferine, for redder litmus  
& uff bl - some do & redder it - Diffic  
to find any pec characteristic - Dr. Hare  
thinks acidity depends upon galvan & it  
a pec st of Galv produces acid - Old Lign  
pumpant out of a pewter cup - Acids cont  
different proportions & acidifying principles



194 I fermented acids in both cases  
I different being <sup>the</sup> ~~same~~ <sup>to</sup> ~~be~~  
diff deg of acidity - <sup>Sulphur</sup> But when left -  
Ic - w a greater property - & when run  
o f y n enfl. Nitrogen came way -  
Nitrous, Nitric, Nitrites, Nitrates.

Carbon - when burnt in oxygen and  
produced - Carbonic Acid causes effervescence.  
when driven off a combination - Eff. Pr

D. Gibson Friday Dec: 31<sup>st</sup> - on Structures of the  
Condyles - femoras - & Patella -

D. Hare Friday Dec: 31<sup>st</sup> 1819 -

Diamond is pure carbon - & tho' diff fr Chem  
is ~~it~~ surely the same in its chem properties.  
Water is found in it, but extraneous &  
not essential. Charcoal is essentially porous - &  
opp a diamond - exists throughout the whole by  
structure furnishing the basis & solid fibres -  
acts in absorbing by capillary attraction - exp  
rises water & alcohol of its noxious or offensive  
properties - & is used to purify spirits - burnt on  
otherwise deteriorate - & ~~is~~ <sup>is</sup> to resemble  
due this discovery to Mr. Society of Peterboro.



2 modes of obtaining it - first add charcoal -  
 still & rectify filter & then distil. Fresh filter.  
Fixed air or Carbonic Acid - can be obtained in  
 other ways - by driving off carb: acid from lime  
 by heat - Paul of Geneva - Why does not heat drive  
 of Carbonic acid from carb: of Barytes - By adding  
 flux which decomposes the carb: acid & produces  
 some oxyd of Carbon which is then driven off.

New Method of Obtaining carb: acid.

Exp: strong - candle - with carb: acid.



Instrument for transferring gases.

Observed air much heavier than atmosphere  
 air & is positively stultic of or deleterious  
 when land immersed pain when cut - Cause  
 in Breuners - Where breathed when candle extin-  
 guish - Thinks no pain of charcoal deleterious  
 from the poisonous oxyd of carbon & not carbon  
 is acid gas. Carbonic oxyd - is generated of oxyg-  
 can be obt: by burning charcoal in deficiency  
 of oxyg: - or by decomposing carbonates  
 or charcoal or iron filings &c. - When subst  
 combine in 2 prop: - It is most energetic



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82 - least so. - Thus Chase says

Dr Hare - Monday Jan 4<sup>th</sup> 1826.

Law - Water takes up its own bulk of Carb Acid at every pressure. Whatever density that air may be - hence by comp we have 100 or any other quantity of Carb Acid - than is done by a Condenser - reverse to the air pump. Exper Proof of lime by Carbonic acid in water - Effect is to render lime ~~in~~ <sup>insoluble</sup> in water & then when <sup>more</sup> water is added or at Carb acid is added the carbonate is dissolved - then mix water - The Cheapest & best method of obtaining carb acid is by fermentation - Our form of Alcohol is given out - When litmus is turned red by Carbonic acid - will become blue by exposure to heat - to drive off Carb Acid -

Carb Acid is expelled by freezing as is in boiling water - It not only comb & alkali & alkali but also metallic oxides - White lead contains a quantity of this gas - & Carbon



of copper a beautiful blue is also 194  
formed. - Pencilash is a sub-carbonate  
containing  $\frac{1}{2}$  the gas of carb acid. also some  
muriatic is sub-carb. & a trace of carb acid.  
When saturated the volumes are equal -  
(Alkaline taste is not totally destroyed when  
given it) By these alkalies may correct  
the sourness of milk - & Bakers correct  
the leaven by potash &c -

Carbonous oxyde -  $\frac{1}{2}$  quantity of oxygen.  
Chalk & iron filings mixed & left to heat -  
iron takes off  $\frac{1}{2}$  the oxygen, the remainder  
is carbonic oxyde & having no affinity  
for lime passes out over water & is not  
much absorbed by water. Sulphurets to hy-  
drogen by burning itself passing flames -  
burns in a light blue <sup>or bluish</sup> flame - These gases  
will not burn when they come out of a test  
very fast, must come out slowly to find  
them to burn -  $\frac{1}{2}$  inch pipe of water is  
about the right measure to run it down  
two inches will be too much -



Carburetted Hydrogen - Carbon itself  
 is the fixed substance in nature can  
 be dissol'd in Chloro vesels. & Hydrogen  
 least fixed & only occup  $\frac{1}{2}$  of the air  
 all the rest is what we call their properties to  
 Hydrogen - Hydrog is the link by which  
 Carbon is united to Caloric - & Decomp  
 of vegetable subst the gas is generated - The  
 flame of hydrogen is scarcely luminous  
 at day time & is so by adding  
 carbon - ~~Carbon~~ This gas is made by passing  
 ether the hot iron tube - & also by  
 Sulph Acid - 2. proportions Bi-carbon  
 the Hydrogen & Carbonat in water Henry  
 have attrib'd the lighting property to volatile  
 oil in solution - Eff.  $\frac{1}{3}$  Carmin Eye  
 cold water a few drops - part a carbon  
 remains while the carbon enters w a  
 portion of hydrogen & forms this gas -  
 not absorbed by water -  
 Eff - out of Super Carb. Hydr - 3 pts.  
 water - 1 of sulph acid & Lime & adding



out of Terpentins. This Carb. Hydrogen <sup>199</sup>  
is also found & decays - a coal fire mine  
or in the earth & can be coal since it  
is formed - Geologists attempt to form  
of it coal - to decay of veg matter -  
Volatile matter of wood or carbon & after  
it nature & coal - Sir J. Hall under pres.  
we made coal by subjecting the volatile  
matter of wood to heat under pressure -  
Has been done & life & miners - Sir H.  
Davy found that it gases or passed thro  
small orifices & pipes would not ex-  
plode & hence constructed a <sup>safety lamp</sup> mine gauge  
round a common lamp - may even  
burn inside & heat the wires red in  
bringing in light



D. Gibbon Tuesday Decr Jan'y 4<sup>th</sup> 1820  
On Compound Fractures. 4 varieties

- 1<sup>st</sup> Simply fractured or to slight m<sup>d</sup> &c.
- 2<sup>d</sup> Var - Where bone protruded to a consid<sup>er</sup> extent - Some advise letting it rem<sup>ain</sup> in the situation.
- 3<sup>d</sup> Variety is wh<sup>en</sup> the bone is crushed & comminuted.
- 4<sup>th</sup> Var is wh<sup>en</sup> it is attended w<sup>ith</sup> laceration of some important organ or vessel - most kind:
  1. sponge away blood & take up artery.

D. Hare Tuesday Jan'y 4<sup>th</sup> 1820.

oleum Tartari per Deliquium - Carbonate of Sub-  
Carbonate of Soda are less soluble than the carb<sup>on</sup> of  
& sub Carb of Potash.

of Carbon with Nitrogen - Nitrogen paper is  
common for a fixed to a gaseous it - With Hydr<sup>ogen</sup>  
& Carbon - Called Cyanogen by Gay Lussac from  
blood - beautiful pigment - it is called Prussian Bl<sup>ue</sup>.  
It was supposed that Phlogiston combined w<sup>ith</sup> Blood  
& fixed it blue colour - But w<sup>as</sup> f<sup>ound</sup> to be an acid  
& called by Scheele Prussian acid - then a  
Carbon, Hydrogen, & Nitrogen - Gay Lussac



obtained the base, cyanogen, by distillation <sup>201</sup>  
assembles Chlorine - forms acid w Chlorine.  
& also w hydrogen - forms salts called Cyanide  
Prussiate of Cyanide of Mercury - Burns with  
a beautiful violet colour. vide Henry for 4 ~~had the~~  
This gas is absorbed by alkalis & water in con-  
siderable quantity & hence proc over & then  
with Hydrogen constitutes prussic acid - Hence  
by distilling Prussiate of Mercury w Nitric  
acid the Prussic acid is obtained.

Sulphur. Sublim is the distillation of a  
solid from into the intermediate state of  
fluidity - Its comp & the reaction subse-  
quent chemistry prod. It is concluded that  
Hydrogen is not essential to its constitution  
unites w the vapour of alcohol - Is a sup-  
porter & base of combustion - If sulphur  
exists in state of gas or in a better support of  
combustion than oxygen. Is susceptible of  
2 kinds of combustion, slow & quick - In this  
respect similar to Phosphorus. Slow combus-  
tion forms sulphurous acid - To form sul-  
phuric acid we burn it w nitre. The nitre yields



a great quantity of oxygen to the sulphur.  
 Sulphuric Acid is 1<sup>st</sup> obt<sup>d</sup> by <sup>distilling</sup> fumes vitreal  
 & called Oil of Vitriol - Now made by  
 combustion of niter in leaden chambers.  
 (Nitrous gas is formed which imparts its oxy-  
 gen to the Sulph<sup>urous</sup> acid formed) Sulphurous  
 & Sulphuric acids diff<sup>r</sup> v<sup>er</sup>y in energy  
 & their affinities - & form exceptions to the  
 law of turning blue veg colours red - it des-  
 trays them - Sulphur Chrysallizes -

Dr Cox's Diary 5<sup>th</sup> 1820. Wednesday 9 o'clock.

Pharmacy. Every art & science will mis-  
 lead us if they are without principles & rules.  
 Man's true glory is doing good. Intelligence order  
 precision are the groundwork of the apothecary's  
 art. What can be more disgusting the preparing  
 medicines in a slovenly manner? A good apothecary  
 an estimable character. The discovery of gunpow-  
 der came from the laboratory - Pharmacy as an-  
 cient as the world - First person must have been  
 his own Physician, Surgeon, & apothecary -  
 First cultivated in Egypt - see Woulapineid -



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Greece Hippocrates, Theophrastus the father of botany. At Rome celsus lived alone for several centuries - Dioscorides founder & Materia Medica next Galen, 7<sup>th</sup> Century Paulus Aeginetia - They crowded every thing into an elementary to cure all diseases - & 8<sup>th</sup> century 2 Period - Arabians - Rhazes - & others - & 12 century published their works - & 13<sup>th</sup> century knowledge & medicines introduced - & close ~ 15<sup>th</sup> century anti & science advanced rapidly - Alchemists - Paracelsus invents many powerful remedies - Van Helmont & Rosicrucians & Alchemists. Linnæus fixed Materia Medica on a firm base, by his classification - After introduction of Pneumatics Chemistry much simplified - If Lavoisier & Berzelius & the moderns were more estimable. In the laboratories of apothecaries some of the most celebrated chemists have been brought up - Perfection & art - not yet arrived, is however stationary - Too many Galenic compounds - better to discard them entirely from the Materia Medica than to call from them



204 Public confidence in ancient composition retards the advancement of the science.  
Proper studies for the Apothecary <sup>Medicine</sup> - demand,  
" liberal education - how can a <sup>Liberal</sup> neglect  
of education which attaches disgrace to the pro-  
fession - Sh. know Latin & Greek, <sup>Natural Philosophy, Chem</sup> Geography  
Mathematics <sup>Geometry</sup> - sound judgment & experience.  
Natural History, Botany, Zoology, & Mineralogy -  
Matter is a heterogeneous compound of all man-  
ner in nature - 1<sup>st</sup> Laws of matter are those of  
attraction & gravitation. Bodies div into 3 prs  
Kingdoms, Veg, Anim & Min. Nature is  
an unit - Rest divs into auto organic & Inor-  
ganic - Globe is to contain some living matter.  
but living animals not some vegetation.  
Minerals - Some clothes encircle the earth.  
some temperate, would the same veg &  
animals - Life is energetic in water in  
Chimies - Changes take place by transferring  
to different climates - Light has much influ-  
ence on vegetation - Evaporation - Hotter &  
drier year more aromatic - Even anim  
in winter is in hot climates -



Influence of age & sex is conspicuous. 208-  
Natural History is very important a Physi-  
cian & apothecary. of Pharmacy Proper?

D<sup>r</sup> Hare Thursday February 9<sup>th</sup> 1820.

Sulphur recent Phosph in burning  
in two states - viz in a high & low temper  
The Sulph at a low temp is burnt  
out of gunpowder. In making  
Sulph acid is concentrated in leaden boilers -  
or Platinum vessels - 1 vessel of Platinum in this  
city or mine wh held 15 fells & cost about  
\$2000. Sulph<sup>ic</sup> acid consists of 3 atoms oxy-  
& 1 Sulph - Sulphurous 2 atoms - & it is  
supposed to be another acid or 1 atom  
of oxygen & 1 of sulph - It is y to obt  
but is exp<sup>d</sup> to form a decomp<sup>d</sup>  
sulphurates or Hydrosulphurates -  
Exp<sup>t</sup> to obtain Sulphurous Acid gas - Dextra blue  
col inst of reddening them & used to bleach  
animal sub<sup>st</sup>, silk & wool - Sulph acid &  
phosph<sup>ic</sup> is y colored but not pure colorless  
heavy oleaginous, nearly twice as heavy as water  
1-850. to water at 6.000 - Sulph acid h 2 mals



of action - I<sup>st</sup> do in act as acid by taking  
 the elements of water from substances as  
 Potash & Decarbonizes - Water is essential  
 to its non-elusive state & c. & c. & c. & c.  
 it pure Vapor - Thinks it do in act as an  
 acid until it has a suff quantity of me  
 to undergo decomposition - Decomp of  
 Water - No action takes place w<sup>th</sup> con-  
 centrated Sulph Acid is formed in pres-  
 ence until water be added - The reverse  
 is the case w<sup>th</sup> ref<sup>to</sup> organic matters -  
<sup>it</sup> must be concentrated to operate on them -  
 I want know if Sulph Acid decomp - mat  
 Have says it decomposes it w<sup>th</sup> it first  
 enters into combination - or a galvanic  
 operation or polarity in their action -  
 H Hydrog comb - oxygen & H oxy - met  
 w<sup>th</sup> the Sulphur - chimney also -  
 of Sulphates - diff a sol of Pot & iod -  
 1/16 a salt of Potash & 1/3 a salt of Soda  
 remarkable as Potash alone is soluble  
 Sulphur comb a carbon & metals



forming sulphurets, which I have <sup>207</sup> pref-  
ferred forming Sulph Hydrog wh n in  
water - Sulphurets of Lime formed in  
a mass by combining at high temp-  
& boiling under water - forms an un-  
der coloured solution - m b precipitated  
by adding almost any acid - Sulphurets  
Hydrogen is evolved -

Sulphurets Hydrogen is useful char-  
acteristic & with Cupric acid forms an  
one exception in which the acid being  
the main principle of acid - Useful to  
detect Arsenic & alkalis - Its combina-  
tion with alkalis precipitates also every acetate  
Test of Arsenic - Sulphurets Hydrogen - it

D. Hare Day 7<sup>th</sup> 1820.

Sulph acid has an action on Copper unless  
when boiled & diff in this w a decamp of water  
the Copper decamp the acid & w it and the  
Copper - Copper attracts the oxygen & acid & sulph  
urous acid is given off - With iron & zinc  
the presence of water is necessary - Reaction  
between of Iron of Mercury & Sulph acid &



208 Common salt - There are 2 Sulphures  
of iron - one in Cuba & the other is beautiful  
gold colour. The other is that formed & labored  
by fusing iron or sulphur. It may also  
be made by exposing iron filings to sulphur  
monoxide to the air. Sulphuric Acid Beyond  
a stronger affinity for water to form  
hydrogen sulphide proper acid properties.  
in destroying blue colours - Eff. Sulphur  
in vapour fusing gold leaf - Oxygen will  
not make it even find the count to.

The Sulphur Hydride is a more active supporter of  
Combustion. It is to support the base fire  
or support by the act of Sulphur & it acts  
as a sufficient quantity of oxygen can be supplied  
at such an immense distance under the water.

Eff. Diluted Sulphuric acid & Sulphur - in the  
production of Hydrogen, the Sulphur combines  
it & produces Sulphur Hydrogen.

Another combination is the combination of the vapour  
of Charcoal & Sulphur - <sup>also alcohol of Sulphur</sup> they form a  
substance exceedingly volatile boils at  
105°. Difficult to prepare. Eff. Boiling the



substance we had condensed in it - <sup>209</sup>  
small part of Sulphur - It is yet an object  
of curiosity - is inflammable -

No. Nitrog & oxygen in atm air is far  
to life. It is not count w. r. very select  
Exp. formation of Nitric Acid - by exposing  
Sulph. acid to ~~atmos~~ heat w. Nitro -

D.<sup>r</sup> Cove Saturday 8<sup>th</sup> Jan'y 1820.

Pharmacy Requires a competent Knowledge  
<sup>is the art w.</sup> Pharmacy teaches us how to know to choose, to  
compare & to combine those simple articles  
which form the compounds used in medicine  
derived from Pharmacology - That first teaches  
a knowledge of nat bodies - all our senses  
are brought into requisition. Pharmacy means  
whatever drives out disease from the system  
no matter in what way - The eye - Smell  
taste & odour tho' requisite is not sufficient  
other things are necessary <sup>or</sup> combinations &  
principles - Sh<sup>d</sup>. know how to distinguish betw  
substances by 2 pieces of Rhei - The mode of  
preparation varies in bodies - & great care is  
necessary - Minerals are proc<sup>d</sup> by Lemizac



210 Martius &c. Vegetables cutting &c. Animal  
substances, barks, washed dried.

Mixture is the proc of mixg simple substances  
to form comp. Pharmacy is form div  
int Galenic & Chemical - Galenic meant  
only to collect substances sine analysis  
Chemical is for use - divided in  
Pharmacy divided in Veg, Animal  
& Min Pharm. & 1<sup>st</sup> Vegetable Pharmacy  
veg has fewer organs than animals, & nour-  
ished by absorption & interseption.  
veg is comp of 5 dist parts - viz Roots  
& tooth, leaves, flowers & fruits. These  
are again divided - There are 2<sup>nd</sup> immu-  
principles 3<sup>rd</sup> fuscous fluids. Veg principle  
is extracted by wine, acids, alcohol &c &  
is prepared by analysis - Fourcroy has  
distin dif kinds of analysis - 8 kinds  
1<sup>st</sup> Natural mechanical analysis - as  
2<sup>nd</sup> Artific Med Anal. 2 kinds - 1<sup>st</sup> by  
powdering & 2<sup>nd</sup> <sup>when</sup> removed. & compact to in-  
crease firmness in a large living  
3<sup>rd</sup> Analysis by fire - obt mineral, organ



transmission will be.

4<sup>th</sup> Div is Analysis by Combustion or converting them into salts - alt H alkalis & neutral salts metals &c.

5<sup>th</sup> Analy eff - med of Water - viz Mucous Boiling - &c

6<sup>th</sup> Analy by acids & by Salts - this helps acid operater in Chem analysis &c - & different veg acids opt - owing to Hydrog & Carbon the bases of veg acids - Analysis

7<sup>th</sup> That effect by means of the products of vegetables as &c &c -

8<sup>th</sup> is by Fermentation - There are some modifications by Theriac - Vids Orfila contains all that is essential in Practical Chem.

~ Immediate Products of veg abt by analysis. Lent procured by incisions - vast broke, filtration & distillation.

Prepared Prim & very numerous - they are few words. & 1 of Sap. Chiefly redists to Baquelin - Chiefly water & volatile matter & but little extract - also contains an



an acid but comb but free.

Tannin, &c also contained - they also contain parties vessels running in leaves & roots & it diff juices, obt by incision.

Gums resins &c - differ what cont dif principles some peculiar & veg - as Benzoin Oculic acid.

2<sup>d</sup> Principles: a gum & Mucilage  
Gum is thick transparent tortoise, soluble in water - Gum Arabic, Cherry tree gum &c. Gum is brittle & easily pulv affords acids from ashes - The delicate pattern forms w gum - white flaky precip is the best test - Nitric acid conv it into malic sac. - lactic & oxalic acids - is soluble in water but not in alcohol. Mucilage is f - roots leaves seeds &c - Mallow & on an occ in b parts of Arum.

3<sup>d</sup> Sugar - f in lig, corns, beets, stalks & fruits as few apples &c. & in in seeds as cerealia, in milk & urine.



sweet, phosphorescent, forms the basis  
 of sugar candy. Syrup is juice boiled w  
 sugar. Comb w 8 neutral acids & alkalis  
 is soluble in water than alcohol.  
 It is the med & solution of oil in water.

Carbon & hydrogen is contained  
 in it. A mixture of starch & water & Sulph-  
 uric acid will form sugar. Sugar Lt obt fr  
 1 & 2 million lbs of cane & manna is sugar  
 sugar unf - Phys & apothec.

4<sup>th</sup> & 5<sup>th</sup> Vegetable acids - Manna by reddening  
 N & - Lavoisier says double base hydrogen  
 & carbon acidified by oxygen - only takes one  
 proportion  
 of acidification. Vine in different ages cont  
 diff acids is malic then acetic & does a  
 retrograde - viz -

5<sup>th</sup> Secula or starch - when fine is of  
 fine white colour - is insoluble in cold  
 water & forms jelly w boiling or hot -  
 Does not form sugar - or oxalic acid - Iodine  
 is the test of starch & c & vice versa -  
 Found in various fruits & is abund in



Wheat. Sago fr Palm, Saltp. Muric. & Fluter - contains also Nitrogen. Peel small & tastes - is insoluble when fresh & soft in Alcohol - is precip. by Water & forms lute w lime - tested in diff. acids - Blue, Purple, elder, grape, Rose, none in the potato & hence a r in bread of potato - forms yeast -

Y: Oils - Carbon hydrogen & oxygen - 3 fold. Fixed, volatile, & mixed. Have diff. deg of Hardness owing to oxygen - diff w action acid. Volatile exists in the plants & gives smell to plants, form Soaps - & 4 are soluble in Alcohol - diff kinds - light & heavy vol oils - Colours diff as yellow, brown, blue green &c. Very numerous - exist only in certain parts - Angelica only one in w oil is contained in every part. Fixed oils are obtained by expression - Volatile oils by distillation no sugar found ole.



215

saccharum. When exposed become hard.  
dissolve resins - separate gold for Nitric  
acid solution

8<sup>th</sup> Camphor - sui generis, found in many  
plants - principally in Laurus Camphora  
Is volatile & combustible & def - W Nitric  
acid forms a fee fluid. By distillation  
from Nitric acid obt Camph acid - Dissolve  
in alcohol & mixes in water - W Sulphuric  
acid forms artif tannin - Is diffused in  
milk & to which for it - Artif camph  
is made by add <sup>gas</sup> camphoric acid to oil of  
Turpentine - & w no other oil.

9 Gum resins - dissolved in dilute alcohol  
& cannot be kept betw gum & resin -  
for deriv fr the roots by incision, 2 kinds  
or orders 1<sup>st</sup> where gum predominates 2<sup>nd</sup>  
where nearly equal & 3<sup>rd</sup> where Resin predom-  
inates - one in the prod of Convolv  
ulid & Umbelliferi - Vinegar & wine  
only partially dissolve them - Sulphuric acid  
converts them into artif tannin -



216 Some Resins are volatile oils,  
oxyferated. No smell, heavier than  
water, non-conduct of elect. Soluble  
in fixed & vol oils & fat. Acids also  
convert them into artificial tannins. Cont  
of oxygen Carbon & Hydrogen. Not detected  
by Sulphuric Ether.

10 Balsams - obt fr certain trees by incision  
& contain Benzoic acid w<sup>ch</sup> disting them  
fr Resin n<sup>t</sup> to be obtained by distillation.  
Benzoic acid is a const in Bals Copais.  
Some solid some fl. Benzoic Storax &c

11 Cooutchouc & Birdlime - is vegetable  
principle obt fr palm. W<sup>ch</sup> b<sup>t</sup> procured  
is milky & dark colour to an  
specif grav is less than water, mixed in  
water & softened in Boiling water. & n<sup>t</sup> to  
be worked into any shape - by filling w<sup>th</sup> hard  
black sand, & tying its mouth & put it  
into boiling water & w<sup>ch</sup> hot press it  
into any shape & put it in gun, dry  
it & let it grow cold. Used in Gunpowder.



is when large for Glysters - Is insol in Alcoh<sup>ol</sup>  
but partially soluble in Ether - Exists in  
Miletae, Mastic & var. of plants -  
It is separated for Resins by Alcohol - &

D. Hues - Monday Jan 10 1820 -

Sulph Hydrogen is a test for all the metals  
except iron, nickel, cobalt, ~~tungsten~~ <sup>manganese, titanium & tellurium.</sup>

Exp - Precip Nitric of Lead by Sulph Hyd nat  
Brown precip - Exp 2 - Solution of copper, greenish  
precipitate - Exp 3? Litmus - reddened -

Exp - no precip or Iron - But if the alkaline  
sulphuret be added a copious precip, black ensues.  
Hydrogen - forms another comb or Sulph called  
Sulphurated Hydrogen - or Hydrogenised Sulph.  
Alcohol of Sulphur - <sup>or Carbon</sup> ~~Hydrogen~~ - inflammable, boils at low  
temperature,

Nitrogen - or azote forms important com-  
pounds - not so easily produced as or sulphur -  
Mysterious compound in nature - Nitric  
Acid is det fr Nitric by Sulph Acid -

1<sup>st</sup> Comb is the Prot oxyd - <sup>or Gaseous oxyd of Nitrogen</sup> - Nitrous - oxyd,  
or one atom of oxygen & 1 nitrogen -



or Nitrous gas

2<sup>18</sup> 2<sup>nd</sup> Nitric acid - one atom of oxygen more -  
3<sup>rd</sup> Per<sup>oxide</sup> Nitrous Acid 2 atoms - exists in  
cant or in - alk & metals, & can be  
obtained separat.

4 Nitrous Acid - 4 atoms -

5 Nitric acid - 5 atoms oxygen -

of H & Nitric acid in imp bott & Phos  
& antist - 1<sup>st</sup> obt by distil Nitric w clay - by  
Raymond Lully - When first distilled a  
nitrite is obtained - Cavendish & Lavoisier  
formed it - Another mode is by Ammonia  
It must be heavier than water - varies in diff  
circumstances - has to be obt as high as 1.62 -


1-5 - Drier the nitric the better - Water is nec-  
1. its being in a liquid state as it is to  
other acids - There are about 22 parts of  
a Utanophen & about 1/5 of Nitrogen in it  
acid in commerce - When concentrated gives  
heat w water & when diluted cold w ice  
& snow -

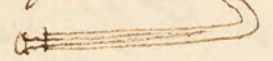
Like sulphuric acid the strongest nitric acid  
will not act on metals - Exp w iron



to prove it - added water & decomposed -  
Nitrous gas is given off - & another portion com-  
bines w<sup>th</sup> metal - Sulph Acid & a part  
w<sup>th</sup> its oxygen & hence diff fr. Nitric.  
When boils on copper dissolves it -  
Exp - adding Sulph Acid & Nitric acid in  
combination to oil of Serpentine - The more  
concentrated the acid to more violent the  
action on Vegetable substances - Sulph acid  
acts by depriving Nitric of a portion of its  
water - The red fumes must be an intermed  
iate acid betw Nitric oxyd & N Acid - It  
can be obt by the acid by distilling Nitrate  
of lead <sup>in a vessel</sup> surrounded w<sup>th</sup> cold - varies its colour  
at diff temp - Colourless 25° below zero -  
Specific grav 1.45 - Turns w<sup>th</sup> skin, boils at 68°  
& red orange fumes & taste acid - To liberate the  
Nitrous gas add heat - & receive the vapour over  
water which becomes colourless - Exp - formation  
of Nitric oxide - rec<sup>d</sup> under a bell glass -  
Nitric acid becomes green w<sup>th</sup> mixed w<sup>th</sup>  
water - Best to obtain it from Nitrate of



220 ammonia & is converted into water  
& Nitrous oxide entirely. Used in Endon-  
stey - but not accurate & different compounds  
will be produced - it cont<sup>n</sup> 3  $\frac{4}{5}$  atoms  
of oxygen & hence imperfect - 

New Endonist -  - Nothing in  
chemistry is more difficult to understand than  
these combinations - Nitrous gas does not  
support combustion, Nitrous oxide does -  
supports respiration & even vital power -  
Exhilarating - It's deleterious because it forms acid  
w<sup>th</sup> oxygen - Nitrous oxide does not - Nitrous  
oxide contains less oxygen than Nitrous gas  
Proven by exposing Nitrous gas to iron filings  
& converted into Nitrous oxide.

D. Gibson Tuesday July 11<sup>th</sup> 1890 -

Curled Spine - about a month 1<sup>st</sup> seen  
describ<sup>d</sup> by Pott - m<sup>an</sup> 1 yr old all eyes - Child  
now subject between 3 & 10 yrs - Sympt<sup>oms</sup> long  
killed hands, trips & stumbles, crosses his legs - & twinges  
or spasm - in bed - when sitting legs are  
drawn up. But no appetite & other voracious.



soon after there is paralysis & lower limbs,  
pain in the back & breathing difficult, tightness  
in stomach - always present. When in adult 1<sup>st</sup>  
stage of emaciation, coldness & rigidity in extremities  
& paralysis - bl & not & no erect penis - Curva-  
ture increases & abscesses form with externally. Vide

Pott - Superior Dorsal Vertebrae in-frey affected -

Pott 3<sup>rd</sup> ju states 1<sup>st</sup> Small - 2<sup>nd</sup> great Enlargement 33<sup>rd</sup>  
is truly curious state & bones - Thinks Pott wrong  
in saying that no luxation takes place & in not  
using any thing to support the spine -

Dr Gibrian thinks there is secondary luxation  
owing to absorption of the spine & also proven  
by Paralysis, which only happens when the curvature  
is considerable & not due to luxation -

Pott is also wrong in supposing it a common  
palsy -

Causes - Predisposing & exciting - Predisposing - peculiarity  
of Constitution - Scrofulous diathesis, but in some  
cases no such appearances - Thinks some constant  
peculiarity must exist - Some say it is owing to  
imperfect ossification - Mrs Bonhomme -



222 Exciting Causes - Many - Blows, Muscular  
excitation, falls, Ruptured, But one circumstance  
not to be in infl & any other - Cause - Supposition  
of diseased vertebrae - Surgeon is called & finds  
curved spine & dis or carries vertebrae, - Here, the  
superincumbent weight adds measure of irritat  
& 9/10<sup>th</sup> die from this cause, viz the Surgeon  
unwilling to interfere or operate.

Cure - Mayan & Petit <sup>2<sup>d</sup> Best</sup> attempted the cure  
by machinery - Le Vacher of Paris one method  
announced in 1768 - in 1788 Jones claimed this  
invention - Vide Bell - Le Vacher's 1 Stays -  
& lower portion used to make good stiff & splint  
upper portion rises round the shoulder & angular  
form - a Port part is upright p. of iron  
with straps - Best apparatus - & Tho' Pott's treatment  
is the best his treatment not proper -

Pott says his bone fused over no operation - but  
already disposed of it - he 2<sup>d</sup> 9<sup>th</sup> says it bones join  
away & if displaced it are dislocated -

4<sup>th</sup> Pott says machinery if not used separates the  
spine or twists it - But machinery is only



for the purpose of keeping the spine in its <sup>223</sup>  
proper place, to support it & not to stretch  
it - This can be done so long as spinal  
& transverse processes remain - Must make  
support on the pelvis or hips - Sir J. Earle -  
has published in favour of machinery & Pott  
himself confined his patients in bed, for the  
same purpose - & hence the utility of machinery  
Must not depend entirely on Machinery  
but Asses are the best - Dr. Cameron has  
noticed in Hippocrates dis spine cured by abstinence  
& used it successfully - After this Pott used them  
for many years - Can not remove the  
curvature Pott says & Gibson thinks this was  
owing to want of opposition to support the  
spine - Mr. W. Caustic & Peas - &c - keep  
up diet during the whole cure - Also Dr. Phipps  
advocates low diet & Sleeping extremely useful  
instruments Machinery -



224 Dr Hare Tuesday Jan 11<sup>th</sup> 1820.

Hypo - Sulphurous Acid - 1 atom to 1 of oxy  
Also - 3 acids of Nitrogen - Per - Nitrous - Nitrous  
& Nitric acids - & 2 oxides Nitrous & Nitric oxide  
Nitric oxide has the properties of oxygen & it  
Nitrous though it contains more - Hydrogen  
& Nitrogen form an alkali wh is different fr  
Sulphur & Hydrogen - Tho' a candle was extin-  
guished in Nitric oxide Phosphorus burnt  
rapidly when ignited - Nitrous oxide ought not  
to be kept over water as it is absorbed but  
m<sup>t</sup> be kept in demijohns soon after it  
is made - Nitrous oxide is best obtained from  
the Nitrate of ammonia - & not Nitrate of  
Nitrates - contain water, give out oxygen  
& Nitrogen gas carries on it its caloric  
& hence its fulminating power - Nitre of  
ammonia m<sup>t</sup> be best to make gunpowder m<sup>t</sup>  
but too deliquescent - It m<sup>d</sup> not dirty the  
gun as common powder, w<sup>h</sup> supersat  
of Sulphuret of Potash - Gunpowder 5 w<sup>t</sup>  
1 potash & 1 Sulphur - Pulv Fulmin 3 Nitre  
2 Potash & 1 Sulphur



225

Muriatic acid, marine acid & now  
Hydrochloric acid - obt for common salt  
by Sulph. acid - will only condense in Camph  
or water - formerly suff (contains oxygen  
but now is comp. of Hyd & Chlorine -  
Eff - Horn of Muriatic acid - when exposed to air  
fumes an evap. of its acidity for moisture?

Is a permanent gas over mercury.

Eff over water - at first comes without heat  
but afterwards requires heat - at first atm air  
is driven off but wh pure Mar acid gas is  
given off it is rapidly absorbed & but little  
escapes - Eff - Solution of ice in Mar acid gas -

Ammonia produces the same effect - rapidly absorbed

Eff - Adding common gas to Mar acid gas for  
solid salt. In this case a solid is formed since  
chlorine is given out - Some say that it is not  
given out but remains in the compound.

Ammonia forms the basis of the most  
powerful pulverulent powder - viz Silver -  
Same effect w<sup>d</sup> take place for Carb acid gas -  
Schell by adding Mar acid to black oxide



226 of Manganese produced Chlorine or  
Oxygen acid - Acc. to Davy it is de-  
phlogisticated & Schuler or more correct, than  
Lavoisier who sup. it a simple substance.  
Sir H. Davy, supposed H Chlorine & Hydrogen form  
the Muriatic acid - But he says, Chlorine has  
no hydro oxygen. Bleaching -

Subsequent facts strengthen Davy's opinion - Iodine  
Oxygen acid & Sulph Hydrogen - or acidify  
principles. He also found the Chlorine  
combined in 2 proportions <sup>or oxides</sup> & by others to  
form 2 other acids besides these oxides.  
Thus Muriatic acid forms 3 oxides & 2 oxides  
acids.

Dr. Cox Wednesday July 12<sup>th</sup> 1820 -

Pharmacy. might enumerate other articles  
as extracts, tincture, lozenges &c - but we need in-  
need - will then proceed to consider the principles  
of the Animal Kingdom - Locomotion distinguishes them  
must say not or it paid off by analysis by  
subjecting them to diff processes - Gelatin  
Albumen, Phosphorus, &c. constitute them



In animals these principles are not so isolated  
as vegetables - When possess some in common  
others pec to one of them only, Nitrogen - pec  
to animal - Albumen gelatin & diff analysis  
1. Mechan analysis - by this we obt insulated  
the external & internal products as hair  
skin, & teeth & internal milk &c - from bird  
down feathers &c -

2<sup>d</sup> is Heat by Water, obt gelatin & fat &c -

3<sup>d</sup> by Alcohol - obt Res fromin, as extractum

4 by acids & alkalies, for Nitro & soap.

5 by Heat infer to Boiling Water - diff volatile  
oils.

6<sup>th</sup> by Combustion - obt H Phosph salts.

7<sup>th</sup> by Fermentation & in gases &c -

3. Mineral Kingdom - furnishes many prin  
ciples & apparatuses nec to carry analysis into  
effect - 1. Commodious buildings, w tables  
scales, weights, above ground & current of air  
& cellar volatile subst are to keep -

2<sup>d</sup> a Laboratory - vide Henry -

3<sup>d</sup> a Shop to hold out medicines - This contain



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apprent. have counters, press, scales,  
+ don't we look for poisoners. & sh<sup>d</sup> only  
encourage such apothecaries. I must advise  
let him attend prescriptions & Pharmacop.  
Warm Room & Garden for raising plants  
order & sobriety of expenditure requires in their  
filters &c.

Instrument of Pharm sh<sup>d</sup> be div into Furnaces  
Vessels & vessels Proper. Furnaces very necess.  
different kinds of furnace - wide Henry -  
Vessels are of 3 kinds - 1<sup>st</sup> Mortars, crucibles  
still v<sup>ss</sup>, & sublim, distile, &c. retorts alum.  
b<sup>ns</sup> - 2<sup>nd</sup> Recipient vessels - 3<sup>rd</sup> Vessels for  
Preservation - Instrument & divided into those of  
Hand - or sieves, cutting instr, mortars, of  
dif kinds, Slaps - Hydrostatic balances, Hygrom.  
Barom, Thermom, Sph<sup>er</sup>om - also Chem.  
instrum Pip<sup>e</sup> & dist, Moulds apparatus -  
Sieves - Fac - imp<sup>er</sup> am amf - Mamp.  
a hand ful - Pip<sup>e</sup> between finger & thumb.  
Alma m<sup>l</sup> Alma - each - Pe - pater equalis - 2 S.  
2 V as much as if please - 3 A seem ut.



13 1/2 bag Bath - Rg - Cochlear - i j iij <sup>229</sup> mod  
or Min. Cochlearium - Gutta - M. Fiat.  
other terms - 1<sup>st</sup> Mechan. Division - action is, from  
over. Exhale Chene & Nitro Acid - eff. by cutting  
filing termination &c - Pulverization effects in  
moisture of diff subst - Copper m to prohib.  
shd to cover of pliable leather. Dry subst &  
subst m to moist not proper - m not add  
to cohesive subst - All dry subst m to be  
dried - Woods water Bath is m to prevent.  
Camp is easily powdered by adding alcohol  
to aromat upon the best - Bef pulverizing  
subst m to be heated & filing in water - Metals  
by Heat & alloy or welding - Ground better  
stones, Levigation dif in dry water to trite  
granulation - in metals, by pouring in water  
or rubbing while mallet or chisel - Mecla  
separation by sifting - compound staves -  
to get fine parts. Elutriation - to separate  
fine parts by fluids - Decantation - to  
sep liq fr solids - <sup>to pass by</sup> Filtration - oils, staines  
flamum fr soich, & line fr salts.



230 R. H. Blotting paper. 3<sup>d</sup> Expression. betw  
boards, staves &c. Despumation - practised  
on those subst containing mucus &c.

Clarification - Calcination at present infel  
converting lime into quicklime -

Cementation is uniting one body w  
another - Thus Carbon & iron still -

Cohobation. Carrying back the distilled mts.  
by Combustion - the formation of new bodies.  
either binary, ternary, quaternary -

By Combustion is in the use of Combust  
body or oxygen - Combustibles two kinds.

Simple - & Compound - Concentration in  
the manner combining of diff subst refer by heat  
by Condensation is in the conversion into solid or  
dense solid - By Capellations - metals are sepa-

rated from each other - By Chrysallization is  
in the eff, Decoction - It is a more subtle

in this water is necessary - but Coction is a  
very additional water - by Decapitation is in

the crackling and fired by shivering & & of

Deflagration is rapid combustion without noise



by Depletion is carrying off water parts. <sup>231</sup>

Depuration - Defecation is exp of wat parts  
some chem change takes place.

Deoxygenation reverse of oxygenation.

Detonation - rapid infl or unise. Digestion is  
prolonged diffusion - for sev days. Deposition is  
the results of Chem act. by the Solution is only a  
simple diffus. by diff. bet to properties.

Evolution is on the contrary also a partial infl  
by Calam. Effervescence - a body displaces a gas.

Efflorescence - depur of wat if Chng taking.

Extraction implies abstr to unmixe from a mass of bod.

Fermentation - divided into various. Acet. & Putref.  
but it is an hint - same action in different  
bodies - Chem affin govern the process - Fusion  
with aqueous or igneous solids & metals.

by Incineration nec results of combustion -  
or formation of acids. Levigation same as

Porphyrisation - Lixivation is ext saline parts.

Lotion is simply w or th what I diss it of impurities

Water wine alcohol ether - Maceration also  
eff a temp & atm. Precipitation is the res



of chem act by wh one body is decomp  
 & falls to ground. Reduction or Reverification  
 is ref oxygen for bods, partic metals. Sublim-  
 ation in dry distillation - N & H princip-  
 Terms in Pharmacy - m to m numerous.

D. Gibson - Thursday Dec<sup>r</sup> 8  
 Morbus Coxarum -

D. Hare - Thursday Jan<sup>y</sup> 12<sup>th</sup> 1821.

Exp 3. Posing. Muriatic acid in Citrus & adding  
 red lead - Prefer it to that of Lavoisier - Mr Murray says  
 that the oxygen acid is a comp<sup>d</sup> of oxygen w an  
 unknown base & with hydrogen forms Muriatic.  
 & has considered the m important questions -

Exp. Muriatic gas & Chlorine gas. White smoke  
 & flame - Chlorine takes O by O. & form Muri-  
 acid w caustic & remaining alkalis -

Hydrogen & Chlorine w eff a tan for Muri acid.  
 Or Citrus destroys the colour. Besides this Chlor  
 fuming comb w red carb<sup>n</sup>. w oxygen 1<sup>st</sup>  
 Euchlorine; is formed by distilling Chloride of  
 Potash w muriatic acid - m to be procured of  
 Mercury with Chlorine can not.



M. to decomposed hyper-mercuric acid -

It dangerous - no efflor takes place -

With combustible, is decomposed & forms combi  
2<sup>d</sup> Deut-type of Chlorine - is m by adding  
sulph and m to oxygen of Potash & distilled -  
dangerous up to explode - m not raise the  
heat above boiling -

Chloric acid from called Hyper-oxygenic  
is obt by satur Barytes w Chlorine - & two  
salts are obt - Mercur & Hyper oxy m - & are  
separated by boiled w Phosph of Silver - Sol  
comb w Mercur acid

no small reddens veg col  
& decomp by light -

Pur Chloric acid is formed by distilling Sulph  
acid w Hyper-oxygenic acid - Has not as yet  
obt by many chemists - French chemist  
can't get results - Oxygenic or Chlorates  
are very interesting - Home beautifed Phenom  
Hyper  
The oxygen of Potash is formed by forming it acid -  
& pass it to alkali - M. to separated by its insolubili-  
ity - m w Phosph of Silver -



Chlorine & Nitrogen is a curious in its  
 Deton power - Many persons & suffered -  
 Sir H. Davy & Dulong - is obt by passing  
 Chlorine thro' Ammonia - comb w nitry  
 & forms an oily fluid - Deton w eff. &  
 when touched or decomposed -

Chlorine does n comb w charcoal -  
 & hence wonder at considering it a comp  
 f oxide, & try obj to Munnings theory -  
 Yet will form a triple compound w  
 oxide - w. J. Davy calls Phosgene or  
 French Chloro Carbonic Acid -  
 also form Olfactory gas - or oil w Chlor  
 hydrogen & Sulphur - is now considered  
 nat & ether - as formed fr acids.  
 Sulphuric acid is except a color

D. Libani - Friday -

Sprain - important particularly in Scroful habits.  
 synovial joints suff n than other, ankle joint  
 most. carries m. & consequence - often - 1<sup>st</sup> cannot  
 wfl - as swelling is consid - w. or leaches & put - after  
 this cold appl, lot & out of bed - & pay remained. When



in females - in a undecol afflic during menstruat - 235  
or in other if a little too cold - after this Blister & inflamed  
part - & then ambros - Opodeldoo & a little sugar - Red  
pepper & sweet oil & 1/2 lb Turp - the more the joint  
1/2 per ankylosis - when swelling without ambros  
Rheumatism - Causes various, fractures dislocations  
Complete & incomplete - & where ends & bones involved  
& dis - others, not - Treatment dep on a kind - If by  
& beniam adhere or deposit of cory lymph in success  
by moving the joint & frictions - Knee joint, elbow  
ankle & all joints in limb - But, bones grow to-  
gether - Where bones & joints no cure - cure itself -  
if broken up will destroy the patient - In other cases  
oil of Turpentine & Capsicum & sweet oil - Issues  
removable but not bef ankylosis - Arabian &  
joint is very necessary - If not cure it & put him  
of Substances bony or Cartilaginous within the joint  
in leg & knee, elbow, ankle & jaw - Waller & Wray  
Key - in leg & knee. but a large - Sir E. Dance -  
Patella - few at the size - Pear round or lentic - Occ in  
unusually - but in pain, until interposed between  
the ends & bones - but occas infl - Diffic to supply  
Cruciat - In suppur effusion of cory lymph -



236 but forms on the ligament - sitting on the  
capsule a joint - Bec any b. by effusion of coagul  
lymph & then we are enabled for ligament arising  
a capsule a joint - Treatment - but based cap. &  
quieted cap so - to prevent motion & useful also to  
keep the tumour soft of the joint - Hey & Brownfeld.  
where can't felt bandage of rec are - I. m. then  
remove it, if it prod an infl - Death has occurred  
for extraction & not a cure. J. b. did open the  
joint once & extr a very large - Prepared on the  
condyles, made incision over it & started out, incision  
healed & got well - the<sup>d</sup> in small incision, above,  
& not intrad finger or instrument - but also the  
capsule is an inflam - Rheumatism rec extr  
a lower part, Rheumatism upper, best - but arises  
for Infl or Rheumat - best to subdue inflam  
1<sup>st</sup> & then operate - use bandage & prev an  
Hydroarthrosis or Dropsy a joint - occurs per-  
in strong & muscular persons - but for Rheumat.  
from it poured out & even elevates the patella  
turn on each side, in an pain - Courses - death  
of Calamine betw secret & absorb - also after  
Tophus or not in, deb & poor off in debility.



Blister. Issues, &c. - not useful.

Wh not effective, in let out the water in  
Kocher, on either side, & obliquely in valvular.  
represent the admission of air - as vital infl or succeed.  
In some cases it can be cured as in Hydrocele - in such  
cases one or two slightly stim injections - Bandage  
or sometimes cure - Commenced a foot - prevents  
distension & renders comfortable

White Swelling - on freq wh scroful patients  
also a females in middle & 15 or 17 yrs old -  
Knee joint in middle - Pain w swelling & joint  
white & integ is changed. & commences tumor  
inside & outside of Patella - Knee spherical in  
no pain. when tumor increases in pain & keeps the  
Knee bent, inside & dis - fluid increases & becomes  
larger - just above the patella & in pain & up  
for a Tibia - Wounds supp enlargement & bone  
but not so - new effusion &c by carries - latter  
stages in dis - on Dissection thickens - ligam  
& Cellular membrane. & effusion - Bone not dis  
Very Analogous to Spavin in horse -

Treatment Diffic to Cure - Also arises fr scroful  
& few fatal - in early stages - W. C. C. Blister



238 Issues - Blisters best. but prod strong  
& then issues - keep limb extended - & at rest  
& if around the joint - W not successful  
& constitution is declin in apoplexy. W  
there is prospect of recovery in amput. C Bell  
recommends a suture to procure anchylosis.  
3 Cases - 1<sup>st</sup> passed under the ligam. & Patella.  
2<sup>nd</sup> Case Passed under Capsula Ligament.  
3<sup>rd</sup> Case - also p. H. H joint & successful.  
W in infl. D. F. thinks too in infl. W  
fractured.

Dr. Hare Friday  
Euchlorine is Hyperoxydized acid.  
Prepared in gas different from Chlorine  
as it is not absorbed by mercury - is comp  
of Chlor & oxygen gas - explodes very easily.  
& is decomp into oxygen & Chlorine which  
can burn a mercury - it is a yellow  
colours but after explosion is white  
Exp - Phosphorus combined w both &  
produces decomposition & explosion.  
Exp - Dental gold - copper & tin - explosion &  
decomposition from the affn for both met  
is interesting as it shows an light upon



The nature of Chlorine - Chloric acid being 239  
composed of oxygen & an unknown base -

Theory of Chlorine - in addit to this 2 more reasons - salts & acid, when lose its properties, & again become acid is a strong & Herard has. of late oxygen elem acid. Those ascent it it really compound is not Chlorine. Rationales -

Production of Chloric acid gas - both fr salt & oxygen - Chlorine can't like oxygen & Phosphorus & Sulphur & when water is added Chloric acid & Phosphoric acid is produced -

With Carbon dry no action, when moisture Phosphoric gas -

Reaction of Bleaching, destroying ~~the~~ color  
offensive odor - Rationales of its union w  
alkalies & metals -

Chloric acid prod & decomp of Barytic  
water - Rationales -

Euchlorine is obt fr Chloride of Potash diluted  
w water & eff to heat - elem exists salt -

Rationales & effl w Charcoal & Phosph &  
chloride of potash -

Effl high Chloride of Potash under water -



240 by Sulphur acid & phosphorus.

Exp - Panning Sulph acid on Phosphorus.

Exp - Serpentine & Chloride of Potash with  
by Sulph acid - These give off Oxygen.  
water acid - And a new view of the minerals  
when by Chloride, when moistened Minerals.  
Some Chlorides are insoluble by Silver &  
Cobalt - Lime - W ammonia Chloride  
C or combine -

For Charcoal - Sulph Nitro & Chlorine

Sulph Nitro by Barytes & igniting them  
W Charcoal - Some Sulphates very insoluble  
Sulph Lime however yields Sulph of Barytes  
& Barytes decompose - Alkali or Potash  
& W Charcoal Sulphates are formed.

Sulph Barytes W  $\frac{1}{3}$  Charcoal - & a little  
oil & add exposing to heat for an hour  
it then readily soluble in Nitric acid.

Pure soda is all in this way -

Nitrates - are decomposed by heat & detonate

when ignited W charcoal -

Minerals not decomposed when ignited  
but by solutions of Silver.



Tests. Zpp - Mixture of lead & mercury also 241  
tests of clean acid - Purify Mixture of clean  
it can't mix soda - by the Mixture of clean &  
Lead. Dr. Thompsons Chemistry best - & most  
taken for that Dr. Bauche.

Dr. Cox Saturday Jan 15<sup>th</sup>

Pharmacy - On the Preservation of Medicines  
Minerals are easily preserved. Acids & they are diff  
veg m b kept in 6 different ways. Sugar, salt, desicc-  
cation &c. 1<sup>st</sup> of Preservation in their Natural  
State, - Pulpy fruits m b preserved for an time -  
Sh<sup>d</sup> be pulled before ripe, kept above the surface  
a pound, in equable temperature, & apples pines  
be sh<sup>d</sup> be kept free from damp air - It is 1<sup>st</sup> that  
a linen cloth will keep them for freezing  
2<sup>nd</sup> of Preser veg in Sugar - roots stalks, flow &c  
preserved by boiling in Sugar, or juices lemon &c  
3. of Brandy - Plums, apricots, peaches &c - in Sugar  
4 of Pres by vinegar - in a Chamber - Pickles - vine-  
gar simpl. the water of vegetation & preserves them  
This water unites on a portion of the vinegar  
& weakens it & sh<sup>d</sup> be poured off & m added -  
5 of Or by Brine or Salt m used in wine



242 m open by desiccating, & n. t. depends  
upon something else mysterious - as few  
gains of Corrosive Sublimate n. preserve a long  
6 by Desiccation. depends if an accept mod-  
ture - Diff circ. nec t. b. att. to - Different  
degr of temperature are necessary -

Manipulations of Pharm resolve them into  
analysis & synthesis -

4 Modes of Analysis - 1 Mechanical analysis -

2 By Reagents, 3 by Caloric, 4<sup>th</sup>

1 by Reagents n. disc. it consist of bodies - n.

consider it the principle key to chemical  
knowledge as all the processes or changes take  
place thro' their means - important Physician

Principal Reagents 1 Watering infusion of Blue veg  
one rend. green by alk & red by acid - Yellow  
becomes brown - It is used to ascertain  
the presence of Arsenic acids -

Alkalies - det acids, ammonia det copper  
& or copper, tests arsenic - Sulph. acid det  
tin, zinc, lead, Magnesia - Nitric acid det  
Phosph & Carb. n. det salts - <sup>det copper for</sup> ~~det gold~~  
Gypsum in white lead,



4. Mm acid silver, oxalic lined.  
 4. Ventral salt in alk & earthy bases - unful  
 5. Metallic salts unful - White Salts, various  
 & mm acid, Corros Sublim Albumen.  
 6. Pure metals det Sulph & Hydrogen - Pure  
 Silver Quicksilver & base black - f.  
 7. Sulphur & Hydrosulph det metals.  
 8. Alcoh & Ether det salts, cannot dissolve  
 sulph salts, & precip them in alkaline water  
 in to use in flammable salts.  
 9. Water & Water solutions unful in tests &  
 to form solution - det oxide of Bismuth, or  
 Algaroth are precip also called sub-nitrate -  
 strata of Super nitro wt is diff & oxide is then  
 down - Butter of Ant or Alga  
 10. Albumen glutin & det turning to -  
 of Simple Bodies - call them simple or not  
 in decamp - or prob all to be compounds.  
 About 60. Simple subst. Light, cal Elect Ph  
 Oxygen Oil Iodine & Fluorine - others Claphed  
 Simple combustibles - 1<sup>st</sup> sort as form acids.  
 2<sup>nd</sup> sort as form alkalis - 3<sup>rd</sup> sort as form inter  
 med subst - only not the same or Pham



244 Compounds - divided into Prime & Second  
alloy binary, ternary, quaternary -

1<sup>st</sup> of Light - app 16 active in prod cert clay  
some precip are changed by it as Cal & red Ore.  
& 2<sup>nd</sup> to pres by cov in black paper - on Dark  
Hydrogen & Chlorine for Murr used 2 Sun -  
Franklin says in a dark about light.

Coxe thinks is now to solar origin & suppose  
agent entirely, adopts Descartes opinion

1 Light eman in eu direct - below 104  
000 miles a second, 3<sup>rd</sup> Im-pounded matter.

4 is Reflected & deflected, 5 angle of Inc  
5 is Polarized - 6 Transparent & opaque -

7 Wt thro' denser med bends tow denser  
& vice versa - 8<sup>th</sup> Infl is greater in propor

n densit & extent - 9<sup>th</sup> Decomposed  
into 7 rays - 10<sup>th</sup> They differ in deg - vibrat

11<sup>th</sup> 12<sup>th</sup> Differ col def an  
union of dif rays - 13 Heating power is

different inversely as refrangit - 14 Refr  
oxygen - 14 This is greater in prop n dist

n red rays, fr a violent, 15 Is 1<sup>st</sup> 1<sup>st</sup> 1<sup>st</sup>  
absorbed n light, but not so - Oysters



Shells never emit any other than yellow light & denies the power of absorbing light & also that it exists in latent state -

2<sup>d</sup> Caloric - material, Coxe thinks best.

Properties - 1<sup>st</sup> The Parts repel each other

2<sup>d</sup> It is attracted by all bodies - & paper for 1/2

an inch had more of - 3<sup>d</sup> Polished surface says  
it more than rough surfaces & is said best.

4 Radiated surfaces are admitted light more  
than opaque - Thus bright inf & is best  
so readily - Polished surfaces is best.

5 Radiated Caloric as quick as light -

6 It conducts diff by diff bodies -

7 Temperat is that it is ex. sens of h<sup>l</sup> & h<sup>l</sup>

8 Expands all bodies - Water excep -

9 Bodies expand fast & at all temperatures  
& diff also in deg of fast expansion - gas in

the fluids - 10<sup>th</sup> The change occurs suddenly  
retarded by press & increased by dim pressure -

120 lower in vacuo - 11<sup>th</sup> all bod solid when  
deprived of Caloric - 12<sup>th</sup> Inver temper is an eff

of caloric in bodies - & when a given differ  
changes a rise in A cent deg - Examp



246 ice never in than  $32^{\circ}$  until all melted -  $140^{\circ}$  deg are absorbed -

13<sup>th</sup> Absolute quant of calor is unknown -  
Incandescence is an eff of Calor -

14 Prod result of heat a body & cohesions with cohesion, from sol -

15 Abstr of caloric prod dim volum -  
cold re - When dim of temp is  $120^{\circ}$  or  $30^{\circ}$  below freezing point of Water -

16 Sources of heat - Sun, combustion, friction, combustion, percussion, Electric, lightning, Sun & fire only

by Temp is estimated not a true heat & Absol by Thermometer -

D. Gibson Saturday - 3<sup>rd</sup> of March -

Osteitis - Disorg a bony point - Spongy bones are little than long or cylindrical - exists on the wrist, foot & ankle - long bones - It is caused by other diseases - or Necrosis or death of bone - In caries preserves its vital principle - It is divided into two species - But one properly speaking - Caries, Necrosis, predisposition for necipancy & that is Scrofula.



Symptoms - fr obvious, sound parts & infl  
& discharge of pus - when open & existed for  
time fungus shoots out - In fungous matter  
is whitish, when air is admitted becomes tanious  
& fetid - Produces an incow by death parts & neig  
bourhood or subat a bone - when one bone is  
affected extends to others if not arrested - I H  
extracted the bone early when a wrist or  
hand by trephines or semi-circular trephines -  
also a ankle joint & foot & condyles & humer.  
Another remedy - & is proposed - viz cutting off  
the ends & bones - Case of Liverpool 1<sup>st</sup> & Moreau  
in France - 1<sup>st</sup> Case condyles & hum & Tib & fib removed  
for swell & stiff joint & shortened limb - Dr Jeffrey  
invented a chain saw - Bef w end to rem the bone  
in use other rem - <sup>when a wrist</sup> Luman Cordric to destroy  
the bones & proc death - fastrie jointe sent careful  
in dissolving & bringing away the bones - But in 9  
cases & 10 in rem the bone by trephine -  
Exostosis - It is divid acc & constat dis - into  
Acute & other - gen a cylindrical bones - but  
resembles fungous hemalodes - When better the



2418 Perosteum of Bone - not so dangerous -  
pen & thigh - Vide A Cooper's Surgical Cases.  
Sent spines project from the bones - unit of  
tumors - Case Every bone & put in subject  
a disease - Where predisposition easily excited by Rheas.  
Scurvy exostosis attacks also the tibia fibula -  
Tropulous fat in tibia - sent once or os fronts  
extend a brain & kills the fat - Where the surface  
a bone only aff to be diseased operation is sent  
successful - Hey's saw is best flattened - Perfor  
or a Shephard is sent successful - Mr. Mather  
I invented a new saw - or a handle revolving -  
very fast, cuts quick - When tumor pen gets  
mole, but if large & a cancellated structure  
pen fatal - No A. Cooper - I succeeded - to be conf  
A Cooper has ascertained that by slitting open  
the muscles & dividing periosteum he has suc  
ceeded since operation.

Osteo-sarcoma - pen arises after the  
operation - Case - Yng patient - tumor suddenly  
arose for jumping, size & marble, grew in  
in few months very large - found tumor & fib.  
ula - recent fung. Semelodes - Amputated.



+ found two tumors - The whole femur or 249  
converted into morbid mass - Cheesy mass - & spic-  
ule of bone - resemble bony vegetation - femur -

2<sup>d</sup> Case - Tumor on ribs & resembled men - Dissected  
the tumor on the ribs - Successful - 6 mo after -  
or died of Phthisis Pulmonalis. 1<sup>st</sup> Case died of  
Phthisis & lungs - few tumor in this way -

3<sup>d</sup> Case - Spinous process on Back - operated & had  
to leave son & ribs diseased - As a Constitutional  
ab dis skin to cancer, fungus hemat, or skin pa-  
can not be cured except by amput & then  
attacks the constitution -

Spina Ventosa - rare - few occur the extren-  
- long bones - as Humerus & elbow - Dis consists  
in absorption of the cells & bone - but becomes  
extremely large - size & shape globe - Shell is found  
in the periosteum & resembles the cranium -

Amputation the only rem - & th is liable to recur  
Case - Lower Jaw - had existed of 2 or 3 years - the tumor  
parts increased rapidly - tried inject & cavity - bone  
now are shattered - introd a probe & penetrated the  
inner membrane & tumor; granulations formed  
& got well -



*Necrosis* - most frequent - runs to Abscess.  
 Bones most affected, most liable to it - H. franks,  
 thigh bone - <sup>(Case)</sup> abscess formed over the bone, rough  
 & scabrous - operated & got well - The only bone  
 is destroyed & new bone forms round it -  
 survives from externally - Caused - Blows, or  
 Perforations Predisposition - few removed by  
 Nature, not held necessary - When Suppurate  
 proof we operate to relieve it put - not necessary  
 we make an incision down in bone & outside  
 a thigh - Apply the trephine & Key's saw -  
 Care laid bare & incise & Tobias - I sent some  
 mine on opening - No new use or violence.  
 No local remedies useful.

L<sup>d</sup> Have Monday Jan'y 7<sup>th</sup> 1820.

Chlorides differ merely from the muriates in the place of  
 the Oxygen either in the metal or chlorine -  
 of Nitro-muriatic acid or Aqua-regia -  
 Proportions not fixed - Nitric acid sh<sup>d</sup>. not be in  
 greater ratio than that of equality or less than it -  
 on mixing them much vapour escapes what  
 is so called to be chlorine - & hence we can



explain its dissolving gold - Chlorine is in  
solution - Rationale Chlorine does a metal &  
hydrogen & oxygen & Nitric Acid forming water.  
In this respect Nitric acid resents oxygen  
many ways & dead - The construction of this is proven  
by procuring nitrates & muriates when this  
acid is saturated - There is no Nitro-muriates -  
Phosphorus - Excites a long time great attention  
on a project of burning at such low temp.  
It is first obt a Salt of Urine, but after a  
cent of bones - or Phosphate of lime - adding  
Salph and liberates the Phosph acid w<sup>h</sup> still  
retains a little lime, rather forming an acidul  
Phosph of lime than pure Phosph acid. To obt it  
fr this is to decie & ignite it, whet red it  
to glass - This when exposed to charcoal yields  
pure phosphorous w<sup>h</sup> is to subseq distilled -  
May be obtained fr Salts of Urine by Nitrate of  
Lead & off the precipitate to charcoal to heat -  
The Phosphates of alkali & earths is in decomp  
by Charcoal, <sup>or</sup> metals, are - Phosphorus has light  
straw colour. soft, cuts like wax, & cuts w a knife  
Melts at about Blood heat & emits fumes in



252 attemp air - luminous & dark. Corrodes  
the skin & produces a very angry sore - Its efflu  
It fuses in rain water & can be cast into moulds.

It forms 3 different acids or 3 diff proport of oxy  
Phosphoric acid is so important for its union  
or bone - It fuses into glass by heat - singular prop  
considering its elements are gaseous. It is never  
found separate from its attraction for other subst  
& for lime - forming Phosph of lime.

Exp. Rubbing a sulphur match upon Phosphorus -  
Selenium These two bodies seem to support each  
other in combustion - & sometimes explosion takes  
place, This some have attrib to water being  
decomp but <sup>it</sup> has says is produced here  
water - Comb of Sulph & Phosph etc inflam.  
Like Sulphur, Phosphorus comb or Hydrogen from  
Phosphuretted Hyd. m is etc infl & air - Action  
Phosphorus is soluble in ether & oils. & renders  
them luminous. - This luminousness is less in  
oxygen gas than in a mixture of Nitrogen & oxyg.  
Cotton dipped in solution & dried ignited spontan.  
Phosphuretted Hydrogen is formed by exp Phosph  
& caustic Potash in water to heat - Rationals



2. the most inflamed subst in nature

253

D<sup>r</sup> Gibson Tuesday Aug 18<sup>th</sup> 1820

Diseases of the Eyes. *vide* Macs.

1<sup>st</sup> Encysted tumors of the eyelids. you see it. either soft  
& lid - contained in a bag & fluid or in a solid.

but chasy - never attain very large size - few size  
& pea - not very large as Malignant. When a orbit  
attains muscles bec larger. Not dangerous & easily  
removed - irritates the eye by compression - may  
eventually displace the eye - & destroy sight.

Treatment - Sh<sup>d</sup> be removed. Operat. elev it lid &  
invert it - incise not open the sac but dissect round  
the tumor - dissect or destroy & clip off or scip  
off w<sup>th</sup> forceps - Early oper it b performed -

When a orbit muscle it is best in an incision  
a outside a direction a fibres a orbit muscle -  
After or prev inflam.

Miliary Tubercle - see the tubercle & not so  
dangerous - Is troublesome & shd b rem w<sup>th</sup> Lunar  
Caustic -

Hordeolum - or sty - see the tarsus glands -

It can collect matter bet H Meibom glands.

It is diffie to ind suppuration - The subst is dis



254 cellular membrane - When Stannet is  
driven Eructics &c - Exstirpation sh<sup>d</sup> not be  
resorted to - When stationary warm poultice is  
best - When not successful Lunar Caustic best.  
Nitric or Muratic acids not used - dilute Chamber  
Trichiasis a Entropion - Pecul to some  
countries. 2 or 3 Species - 1<sup>st</sup> the Tarsus is not  
inverted 2<sup>nd</sup> Tarsus itself is inverted & 3<sup>rd</sup> Distich-  
iasis & owing to most quantity of hair. 2<sup>nd</sup> former  
is frequent - Inflamm is prod & sight is destr.  
Caused. either fr Elongation ~ Tarsus - or relax  
~ Orbic Tarsus. But in 9 Cases & 10 - it is owing  
to thickening a living membrane - after inflamm.  
Crampton 1<sup>st</sup> ascertained this cause - Tarsus the  
edge ~ Tarsus inwards & irrit the eye. Ware  
says the relaxation ~ muscle is the cause & re-  
contracting the lid to prod contraction - not  
used now. In some cases the lashes are pulled  
out, but not effectual as they grow again -  
In some cases short hairs irrit the eye - When  
inverted may not hold up the lid by adhesive  
plaisters - Those who suff 14 die owing ~ elong  
~ skin cut out a portion ~ skin. Richter -



But this is not the cause & proceeds from 255  
thickening & internal membrane.

Operation - In divide the lid & union to outer  
Tarsus - & when divided grasp in a hook & draw it  
out & then dissect w/ Pterygium - scissors - pen  
then is consid here & w/ sponge frequently.  
It is to prop to cut off the wh edge & tarsus.  
Saunders horn & knife. cut a horn - D. Dorsey  
hook & cut off w/ scissors. Gibson doubts the prop  
of removing the tarsus as tears w/ flaw over  
the eye - & on thereof I dissect w/ living mem.  
After op - lid - prev infl w/ cold applica -  
Retropulsion - is the reverse & former & not so  
severe - Intum mem being effused is enlarged  
called Lagophthalmos. Lower lid most subject -  
upper part & lid descends on the cheek. & Sci  
W. Edwards prop operating on for hare lip. It  
also arises fr thickening & living membrane  
& 2<sup>nd</sup> species for adhesion & lid & cheek - in one case  
a lacer it w/ curved by spider's bit - in this case  
dissected it away - & succeeded w/ adhesion stops. but  
some deformity still exists. Best operation is  
Adam - Lette V & middle & tarsus.



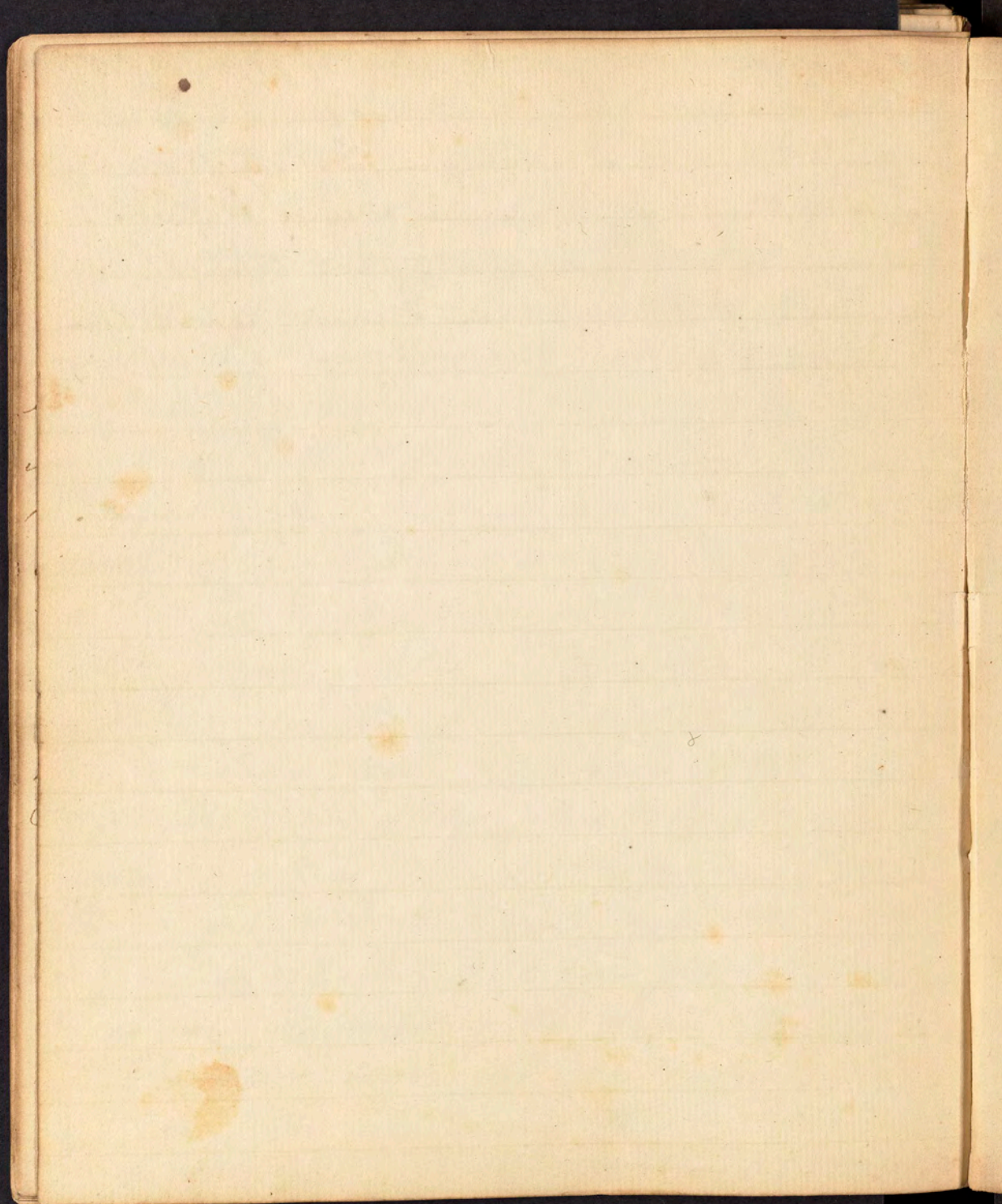
236 Make the incisions w scissors -  
Close the wound w adhesive straps - & prevent  
inflammation

Encaethus - one of the minor of the eye, seated  
in caruncle lachrymæ <sup>but Cancerous</sup> - in early stage it turns  
is painful & inflamed & resembles swallow's tail.  
involves the Puncta Lachrymalia - & causes  
Epiphora or water disch of tears - Operation draw  
it out w hook & dissect it out completely.  
w curved scissors - w cut aw the cellular memt  
& lining membrane - but very large - when  
cancerous it is best to extirp the eye -  
Pterygium - seated in ball of eye - per se in  
angle of eye - triangular - about 2 - on each  
side & meet in center - exposed - but called  
Pannus. in early stages & dis - there is a small  
yellow spot like fat near the cornea. When  
this has existed for some time vessels extend to  
it from the caruncula & then goes on & covers  
triangular shape - aw the shape of eye.  
When a cancer resembles a speck & after  
operation this remains. The tumor is  
very vascular -

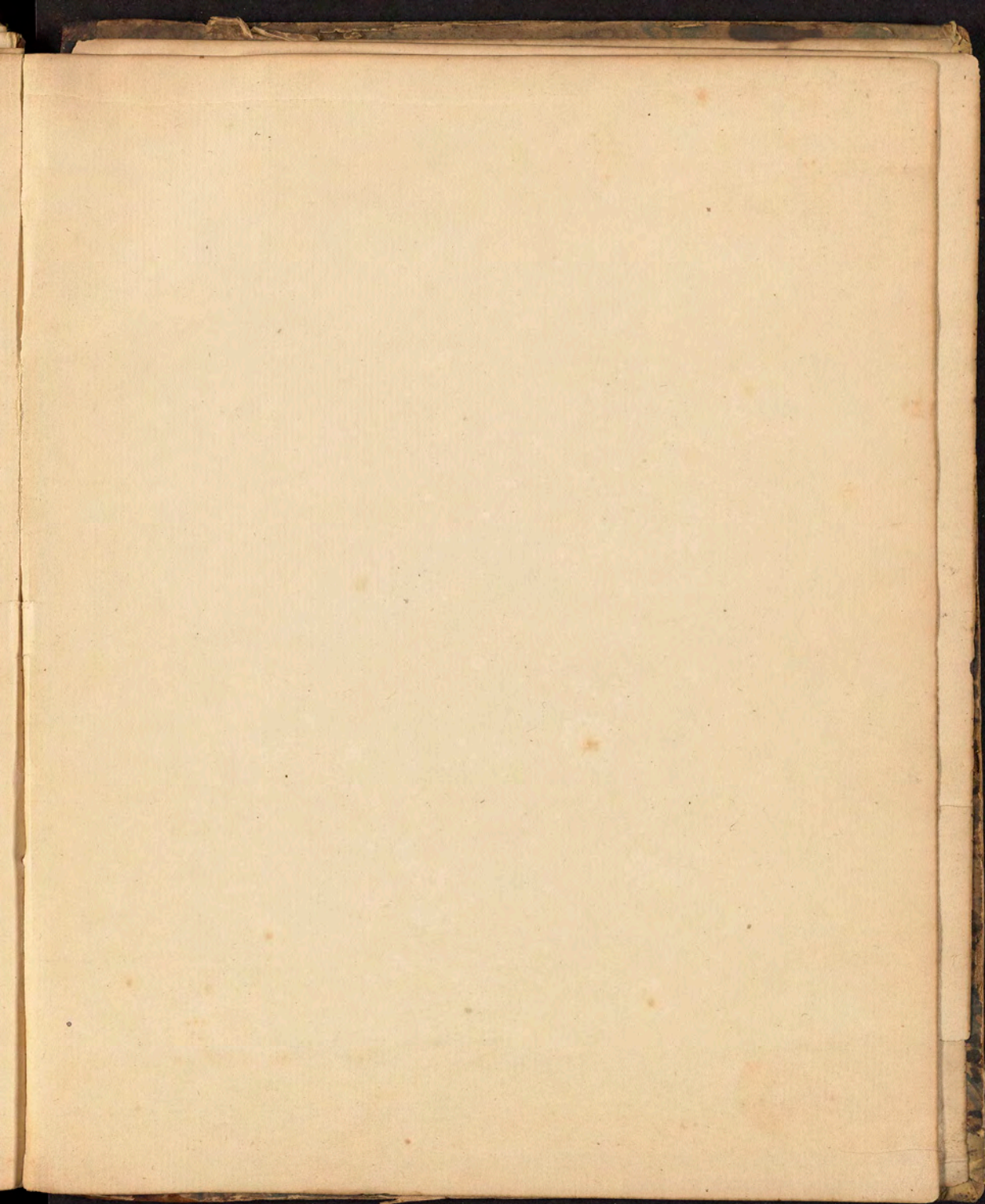


254  
Operation - Can few be removed by forceps - the only  
remedy is excision - but occasions troublesome  
symptoms - & it is only in advanced stages that operation  
is necessary - or where the cornea is opaque -  
elevate it at the angle & direct towards the  
cornea - but on return I must repeat the  
operation -





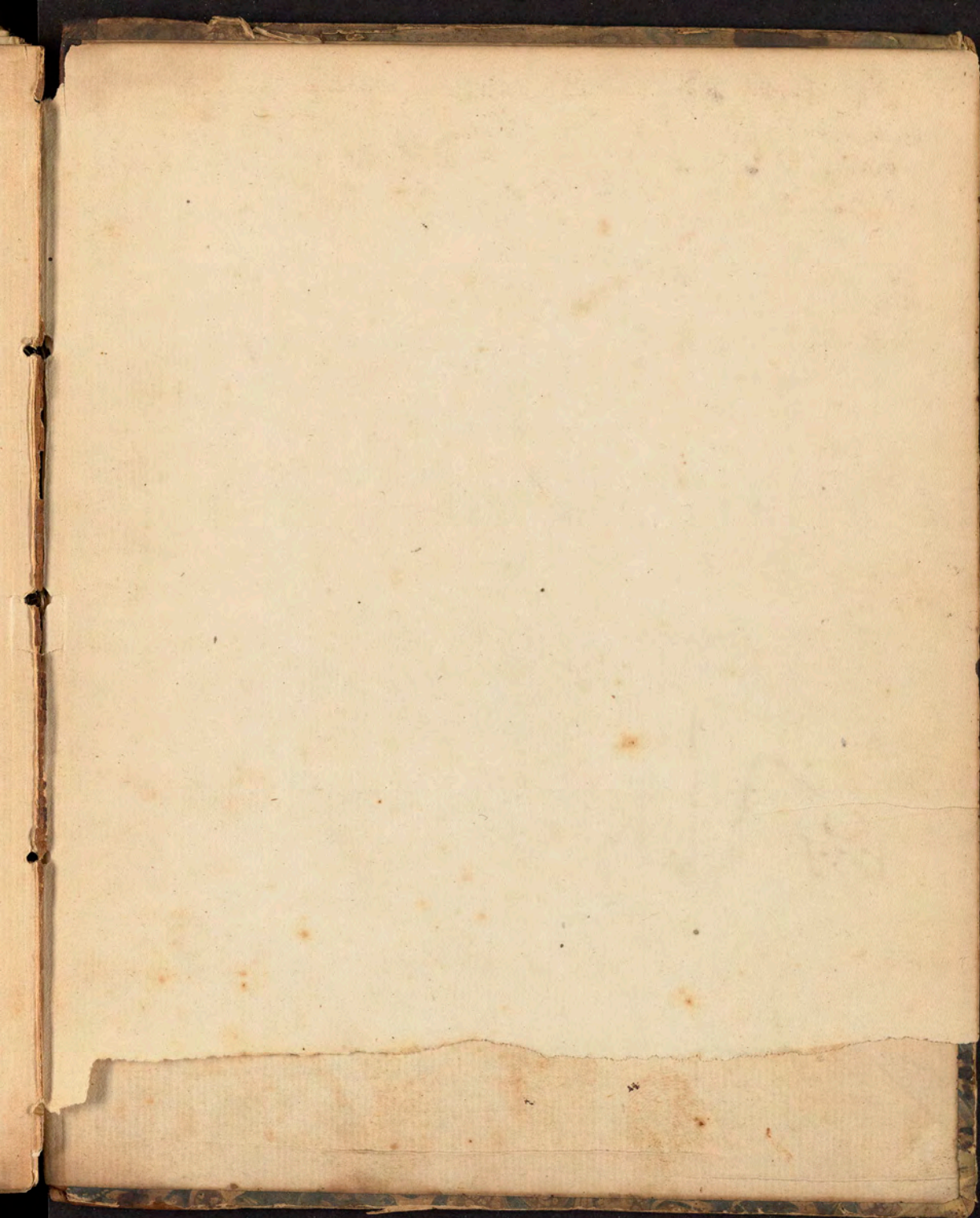






In Prolapsus the effusion in the spinal  
narrow relieved by cupping. Purgative  
day, Blunters & Low diet. & Cases relieved  
& cured by Dr. Physick -



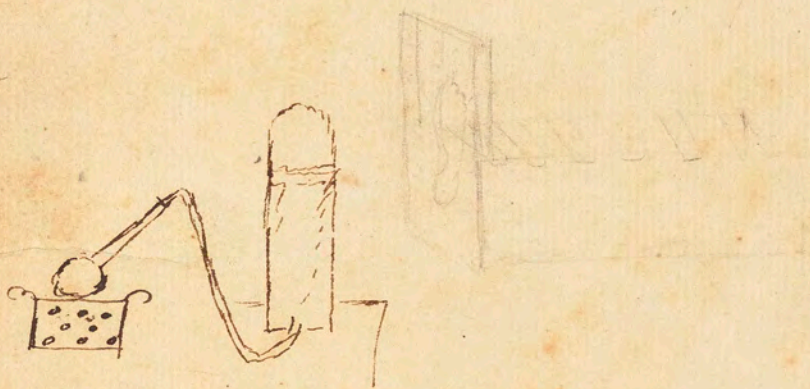




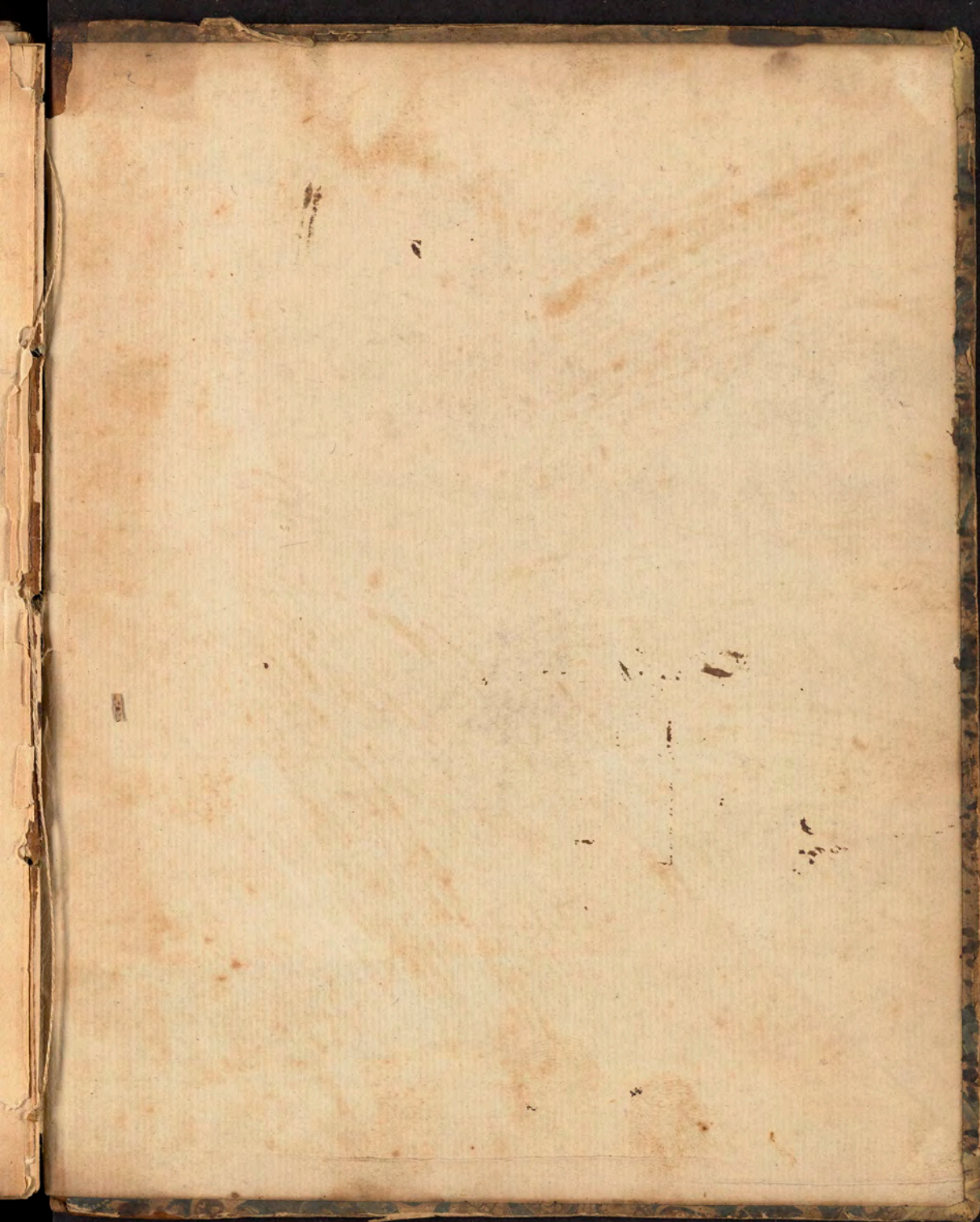
S.P. Spent a week in Guinea. results of his  
 trip in West Africa & back for it all the  
 purpose of the book produce the displacement in the  
 field of the study in the in great cause - S.P. as  
 certain in what is to be done occurred - & the  
 result a cause - this is very great coadjutors not con-  
 form the system -

Least a brand - a rare occurrence -  
 in usually found - a cross a Red & blue  
 the? when the the the first.

The Lead a Mass long for this to be a St. i. Pro









James L. ...  
The ...  
Maryland